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ENGINEERING FINANCE COMMERCE

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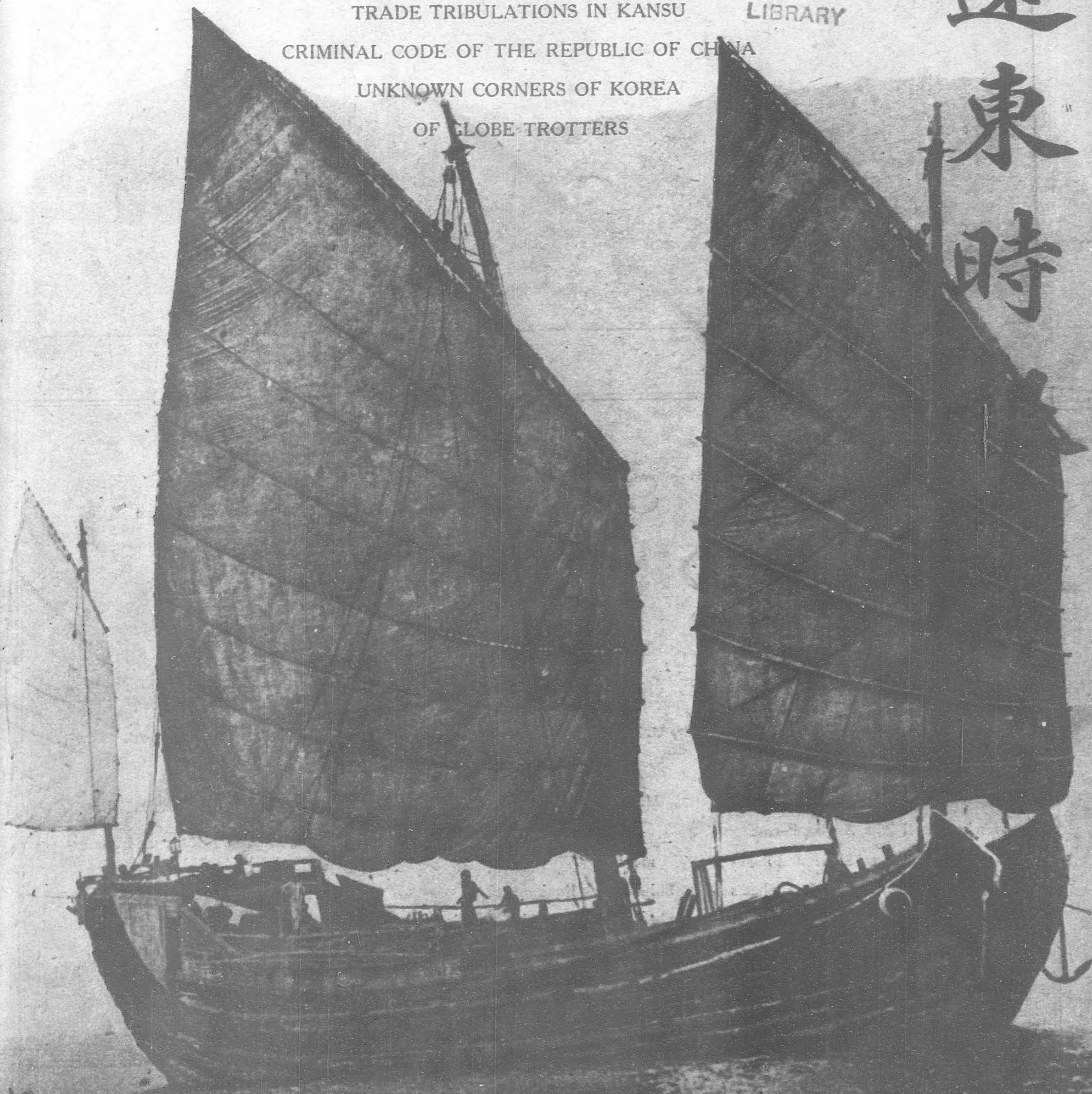
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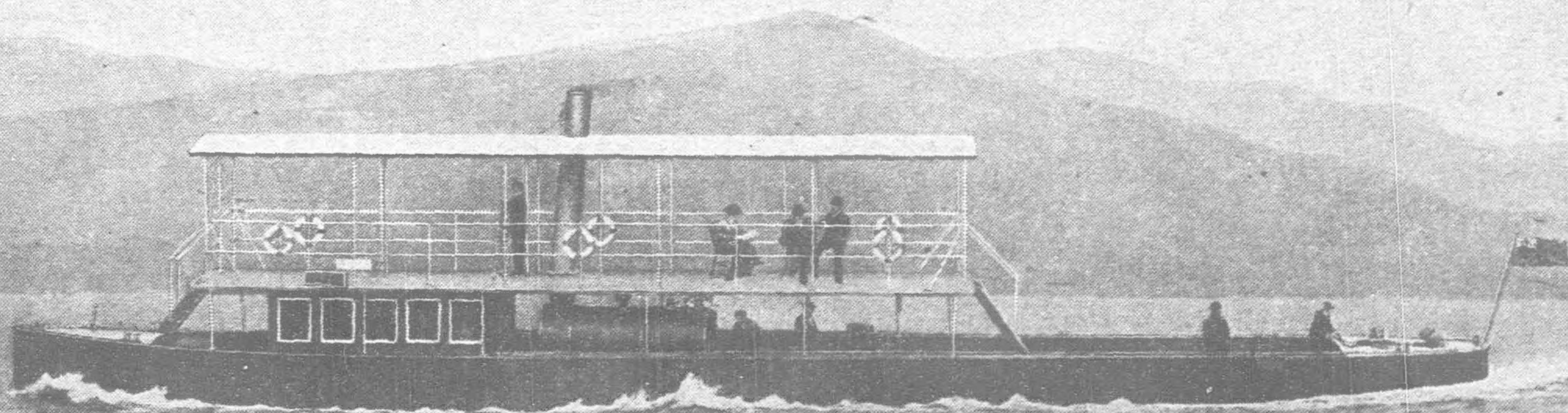
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The Far Eastern Review

ENGINEERING

FINANCE

COMMERCE

VOL. XV

SHANGHAI, OCTOBER, 1919

No. 10

Invest in China!

A Motive and a Method Open to American Capitalists to Combine Big Profits and a Splendid Purpose.

"If the 'Open Door' in China is to stay open, it will have to be propped open—with bags of gold." This was the dictum of a well reputed American publicist some two years ago after a trip through China. Mind you, this was before the Ishii-Lansing notes* had given rise to speculation as to when "special" interests become "paramount" interests or the Banking Consortium was struggling as a new born babe for breath. The multitude of events which have happened since to overthrow the prestige of Western liberal ideas in trade and diplomacy as affecting China bring this sentiment quoted above very much to the fore.

Parents always resent the advice of maiden and bachelor relatives as to how to discipline children. In diplomatic relations the advice of rank outsiders is resented as unwarranted interference. The instance of Japan becoming wrathful because the United States did not approach China via the Japanese Foreign Office with respect to certain affairs is still fresh in memory. Her constant objection to American plans for the Consortium, especially as it applied to the proposed unification of railways, is that "America has nothing to give up." It is vain for America to reply, "You have little to give up to which you have anything better than a questionable title, and therefore our position at least is one of a clear conscience." To this the Japanese retort is a mere smile. Japan smiles because she is in possession.

The Value of Britain's Policy in China

When Russia was grabbing the North, France the South, and Germany the East of China, back in the late '90's everybody expected there would be a break-up and parcelling out of China. But Great Britain took a hand, not by addressing a moral discourse to the offending nations, but by setting up a similar "sphere of influence" (though under more moderate conditions) in the Yangtze valley, and by securing a naval base at Weihaiwei for so long a period as Port Arthur should be occupied by another Power. From these two dominating positions she has been able to exercise such an influence that the "sphere of influence" seemed about ready to fade away from anaemia, until the upsets of the Great War came to revive it. If Great Britain had agreed to share the ambitions of certain other European nations, the partition of China would certainly have taken place. But luckily the policy of Great Britain was toward the development through education and evolution of a strong China, and this attitude fortified by the position which she had seized, if you please, enabled her to protect China as the latter groped her way in the dazzling light of a new order.

The 1896, '97, and '98 Chinese railway agreements are virtually cessions of exploitation areas, whose aftermath are the Shantung and Manchurian questions. From 1898 to 1907 the railway agreements provide Chinese government lines, but under only a limited degree of Chinese control. After 1908 such agreements virtually exclude foreigners from the exercise of control upon Chinese railways. Only under the growing sense of security which the liberal attitude and acknowledged might of Great Britain gave to China, could this improvement in conditions

have been possible. Britain is being censured most severely by her critics for having bartered away her protecting influence over Shantung for Japanese aid in the war. But suppose Britain had not set up this protecting influence, would Shantung now be any safer from Japanese militarists? And in addition, what is the likelihood that Japan would have assisted in the war at any price? That there is any China now capable of being indignant at her wrongs is largely due to the material position of England upon Chinese soil.

Failure of America's Past Policy

Now suppose that the United States during this period of twenty years had associated herself with England as she has associated herself with the Allies during the past two years?

Suppose that her business adventurers to China had been assured of the backing which now is assured to the Consortium bankers?

Suppose that when American contracts came into conflict with the asserted interests of other nationals, the holders had been encouraged to stand upon their rights, instead of being forced to depend upon their own bargaining resources and the aid which impotent China could render?

American railroad contracts at one time and another in China have touched every section from the Siberian border to the southern coast, from Szechuan to the sea. These contracts cover routes aggregating 7,000 miles. Yet not a single line has been built. These lines if now in operation or under construction would give the United States a position of responsibility which would have been recognized the same as England's has been. If this position had been accepted there would have been no secret Treaties with respect to Shantung. Japan would have been forced to approach the United States as she approached Italy, France and England.

In failing to assert her contract rights in China, America not only acquired the unenviable reputation as a "do-nothing" in China, but she lost the opportunity of an epoch for moral leadership in the Far East—a loss which bids fair to be reflected in other sections of the globe.

One would think that by her non-aggressive attitude against other nationals in China, America would have won their goodwill. The event proves that she has won a mere condescending good-fellowship. Strangely enough, she has won instead the good-will of the Chinese whom she has not assisted. But China is finding out that when one lives in a frontier community, one's best friend is likely to be a man quick "on the draw" rather than one soft in speech. The good will which Americans have in China

*On November 2nd, 1917, after a series of conversations in Washington between Viscount Ishii and Mr. Robert Lansing, U. S. Secretary of State, an exchange of notes was made with the object of "silencing mischievous reports" with regard to the interests of America and Japan relating to China. In these notes the American Government recognized that Japan "has special interests in China, particularly in parts to which her possessions are contiguous." The interpretation placed upon the phrase "special interests" differs in Japan and America, the Japanese idea being that it connotes "paramount" interests.

is not for anything that governmental policy has done for them (if the remission of the Boxer indemnity be excepted), but rather for the personal opportunities and services which private American benefactions have given them. Chinese attitude toward Americans is personal rather than national. As philanthropists, Americans have made a great success in China. As diplomatists they have made monumental failures.

Industrial and Commerical Opportunities

But the personal good will which Americans have achieved among the Chinese perhaps makes possible a final diplomatic success, if the present opportunity is not neglected. Anyone close to the situation in China knows that there is a great demand on the part of the Chinese for industrial development. In the treaty ports, great factories, warehouses, and all the evidences of commercial activity are growing daily. In the provinces there are scores of attempts at the same thing, but most of these have been unsuccessful. The reasons for these failures are multifold. Poor location, impossible communications, officials' extortion, oppressive taxation, improper care of machinery, break-downs in intermediate processes, "squeeze", faulty financial policies, poor accounting methods, over-extended credits, all of these have taken their toll. Perhaps all of these may be summed up in the word "inexperienced."

Anyone who knows the commercial instincts of the Chinese knows that no official would tax an institution to death, if he actually knew that by so doing he was going to deprive himself of revenue. No gentleman merchant would insist on locating an enterprise in his ancestral village, if he knew that by so doing he fore-doomed it to failure. No superintendent would deliberately withhold lubrication from his machinery, if he knew that the direct result would be the loss of his job. Even stockholders would go without dividends if they knew that by premature distribution of premiums they were jeopardizing their principal. But how far it is safe to go has not been learned, and for some time there has been hesitation in starting new industries because the object lesson of so many failures is ever before the would-be promoter.

But this hesitation cannot last long. Anyone who saw the parade of 17,000 students in Peking last November; anyone who has seen the earnestness of the present Student Movement; who has noted the effectiveness of its organization, the evident control over all its members, will not doubt that a tremendous dynamic force is present in China. One of the directions which this force is taking is toward the encouragement of Chinese industries. The students realize fully how necessary to the comfort of the community are many of the articles of Japanese manufacture. To make their boycott effective they must provide a substitute. To this end they have been listing all of such articles as can be made in China. Next they have searched the markets for samples of the possible substitute. Third, they have consulted the craftsmen as to possibilities of improving the quality of the Chinese article, reducing the price and of enlarging the capacity of the shops for production. Fourth, they have taken the Chinese-made article, hawked it upon the streets to advertise it, and thus assured it of a market.

A Fillip to Chinese Manufacture

Obviously the actual application of these methods does not extend far beyond the hand trades and the household industries. Soaps, cigarettes, toilet articles, umbrellas, toys, kerosene lamps, and things of that sort have received immediate attention. There are, however, a large number of articles which make up a big proportion of Chinese imports but which do not lend themselves to small-shop methods of manufacture. For these, big machinery and foreign assistance, both technical and financial are required. Among the more important of these articles are textiles, leather, paper, iron and steel manufactures, chemicals, and all sorts of machinery.

It is not proposed that American capital should come in to assist the Chinese students in making effective the boycott against Japan. Although the Japanese press charges Americans with being responsible for the boycott, that charge is an undeserved compliment to American tactics. But it must be

recognized that here is an influence at work which is bound to have an effect beyond the present issues. The research which has been made by these students has revealed to the Chinese merchants their dependent position as nothing else could have done. At the same time it has pointed the way not only to independence, but to a new order of national prosperity. For example the cotton merchants of a certain district have learned that the cotton from their locality goes to Japan, is spun, woven and returned to them as cloth with an increase in price many fold. The silk merchants have found that the silk which Japan sells to the United States is for the most part Chinese, being re-reeled in Japan to suit the American trade. They find that the better grade of cheap cutlery though labelled "Made in America" is really made in Japan out of Chinese iron. In China hides are cheap but shoes are dear. There is no profit in fruits (except in a few choice locations), but jams and jellies are prohibitive. So it goes down the list. The Chinese merchant is the last in the world to consent to be "done" after he knows it. A people with whom neither the Scotch nor the Jews can compete in trading will not perpetuate that condition if they can help it.

How American Business Can Succeed

For this reason, if for no other, the impulse for industrial development which has been accentuated by the boycott is bound to become a positive and permanent force. It is merely the good fortune of the American dealers in machinery and factory supplies that the missionaries and educationalists of his nationality have created for him a wonderful personal good-will, while the negative attitude of his government during years of misunderstanding have removed from him suspicions of political motives which affect all other nationalities. If he will give any guaranty of willingness or ability to make use of the advantages which now come to him ready-made, he will have openings and opportunities actually thrust upon him.

But there is practically no method of making the contact between the American entrepreneur and the Chinese opportunity. A Chinese conceives a project. He works it up to the point of knowing what capital he needs and what mechanical and technical assistance he will have to employ. What next can he do? He visits the nearest American Consul perhaps. The Consul has no money, no engineers, no technical knowledge of the industry under discussion. The best he can do is to report home. In due course of time the report of the Consular Bureau—six months later, at best—reaches the hand of an interested American. Then ensues correspondence with the Bureau. More correspondence with the Consul to find out if the Chinese is still interested. Three months pass while the letters are interchanged. The American decides to come. Probably six weeks more finds him in China. This has been in fact rapid work. He begins to get acquainted with China as it is described in the bar or lobby of the Astor House at Shanghai. He gets a few side lights on Chinese politics from the daily press. He is held up for treble ricksha fare because the puller knows how to get it. He gets lost a time or two while sight-seeing and finds out that Chinese and "pidgin English" are not the same languages. Finally, with a host of prejudices aroused, he gets in touch with the Chinese who made the inquiry, and begins to "dicker." He finds the whole atmosphere so different, his fundamental assumptions so false, that he must rely upon advice, and the advices are contradictory, that at last he concludes that he cannot trust his own judgement. He becomes cautious, and ends up by deciding that the "little old U. S. A." is good enough for him. He goes home—to tell wonderful tales of the scenes and the corruption in China. There are scores of just such who have come to China in recent months. To date there are just three classes of Americans who "stick" in China: those who were born here, those who have nothing in the States to go back to, and those who represent powerful concerns who have made up their minds that China is worth while and have planned their organizations so as to understand China.

Wanted an Industrial Promotion Company

The situation now calls for an American organization which shall undertake the general promotion of industrial enterprises. This organization must have capital enough to stand upon its

own feet for several years until it has made a reputation among the Chinese for ability, integrity, and financial capacity. If the plans of the Consortium go into effect, that institution will probably take care of enterprises so large as to have a political aspect. A limit of \$5,000,000 has been proposed. But the prosperity of a country, industrially new, rests upon the success of small local enterprises—concerns involving from \$10,000 to \$1,000,000. The \$200,000 enterprise is quite typical. This would be the field of our Industrial Promotion Company. In America a thrifty, young blacksmith who wishes to turn his hand to machine-shop work can get a loan from his bank for the purpose. There is no such opportunity in China—or, at least, it is very recent and very limited. Why? Because the native bankers have no experience to guide them as to what loans would be safe, and the foreign banks, with but one or two European or Japanese exceptions, deal only in exchange. But this institution would have to be something more than a mere money lending institution. In the first place there is practically no experience to show the foreign banker, no more than there is to show the native banker, the safe from the unsafe loans. To protect himself, the lender would have to maintain a technical organization to investigate not only the standing of the parties applying for funds, but also the conditions surrounding the enterprise, such as transportation rates, sources of raw materials, condition of the market, scope and development of competition and the efficiency of the producing plant. As a matter of fact, his clients in most cases are not experienced in doing this sort of thing, so that in making such a survey he would be entering the field of efficiency engineering. An inevitable result of these surveys would be that experienced foremen, accountants, and other technical staff would be in requisition by the Chinese firms desiring financial assistance. There has never been any disposition on the part of Chinese to avoid the use of foreign experts, except where such men were likely to have political powers. By furnishing such experienced employees to the Chinese firm, the Promotion Company would be supplying the most essential factor toward insuring the safety of its loan.

It is believed that after a few years had yielded experience and had won for such a company the reputation which a reasonable term of success always does win, there would be little difficulty in transforming the loaning feature of the business, so far as was desirable, into an underwriting institution. By this is meant, that in time, providing the Company made good, the fact that it stood sponsor for a given enterprise, say a cotton mill, would be sufficient to give the notes or bond issues of such a mill, currency upon the market. It is firmly believed that there are immense sums of money still in hiding in China. These would come forth for investment if safe investments were at hand in China. In this way it would be possible to extend the activities of the Promotion Company very widely without necessarily expanding its capital.

Industries Requiring Help and Development

Every day the need for such an Industrial Promotion Company is made manifest. Here is an iron foundry which has closed down because the head office was loaded with useless sons and nephews whose salaries hampered the work of the concern not so much as did their interfering jealousies. This could be opened up by re-financing, giving the new capital preference, and allowing the old capital to share in the remaining profits as earned. A foreign foreman and accountant would prevent a recurrence of the original trouble. There is a tannery which failed because the leather was sold for Russian roubles which now are worthless. At another place is a cotton mill all ready to go, but the backers over-extended themselves in construction, and have no working capital left. A small mine needs some machinery so as to insure sufficient output to justify building a railway spur to it. These projects cannot be put on their feet by the occasional tourist who happens along with money to spare. What is needed is a concern which makes business promotion a specialty, located in China where it is accessible, with resources in capital and technical organization so that it will feel safe to act, with its officers on the ground fully empowered to act. If business is to be done

with the Chinese it must be done by men who are responsible for what they say. If the American firm is going to stay in New York and be represented in China only by a well paid "office boy" who can only be a medium of communication, the Chinese also will protect themselves by acting through "go-betweens" with all the accompanying commissions, intrigue, misrepresentation, blackmail and "squeeze." Until American finance makes a home in China instead of making a visit, American trade will have to depend upon the luck of the occasional salesman. With an underwriting organization such as has been described, there would, in contrast, be created a fundamental connection between the demands of China and the supplies of America. Every foreman specifies the makes with which he is familiar. Every concern put on its feet by this American company would look to Americans for its purchases abroad. A systematic and dependable trade would be developed in contrast with a trade largely adventitious.

This is no time to hesitate. To be sure the rate of exchange is bad. But Prof. Irving Fisher says that measured in terms of gold, a permanently higher level of prices has been reached, that while there will be minor adjustments for which allowance must be made, the captains of industry for the next generation will be the men who first make up their minds as to where the mean level will be and then put on full steam ahead. If steel measured in terms of gold is to remain at a high price, silver will also. While men are waiting for the old two to one exchange (two Mexican for one gold-dollar) to return, others will be making fortunes.

Policy Demands American Interest in China

The internal situation in China is bad. True. But foreigners are safer from violence to their persons in most parts of China than in their home countries. Foreign property is respected as if invested with sanctity. Is the attitude of the Government of the United States in doubt? There is the promise of the State Department to the Consortium to see that its legitimate interests are protected. Has the United States Government ever denied to the small what it freely extended to the great? Besides if there is any one thing calculated to enlist the support of the United States Government in the protection of American interests abroad, it is to have some American interests abroad to protect. Mexico? you suggest. But remember that as against American interests in Mexico there was the whole American interest in the suspicious South American countries to weigh. Every aggressive move in Mexico at that time was a move to close the doors against Americans in Argentina, Chile and Brazil. And since the Mexican policy was first conceived. America has taken the great step across the ocean into world politics. What counter interest has America to protect which would influence her to abandon legitimate enterprise in China? If all China is to be abandoned, what is a navy of 200 ships doing in the Pacific? Undoubtedly, the Government of the United States is now ready to protect American business wherever it has a right to go. But if it does not go where it has a right to be, there will be nothing to protect. The Government of the United States does not go into business for itself as some others do. But it will maintain conditions so that private enterprise may proceed if it chooses to do so.

It is also a mistake to believe that China is absolutely dependent upon the support of other countries. For the time being she is weak. She can be imposed upon. She can be robbed hither and yon. But she has a wheat field a thousand miles long and six hundred miles broad. She has a rice field of the same dimensions. She has 150,000,000 men, young and old, to till those fields. She has 150,000,000 women who have given or will give birth to sons. Until the fields cease to yield, or the women become barren, there is going to be a China—a China with her face toward the future.

Any future which does not include the Chinese as a strong, united, progressive people will be as disastrous for the rest of mankind as it is for the Chinese. There is only one way to gamble on this proposition. Play for the Chinese to win. If the American business men put their money on China, into Chinese enterprises, there will be no takers on the other side. Business can win back what diplomacy has lost.

Criminal Code of the Republic of China

Second Revised Draft.—First Part.—General Provisions

We publish the full text of the Second Revised Draft of the Chinese Criminal Code in this issue as a further contribution to the documents relating to developments and reform in China published from time to time by the FAR EASTERN REVIEW. Those who are interested in reforms in China will refer to it with interest as material evidence of the existence of a determination in China to strike at the evils which have existed in the past and which have served to harrass China in her efforts to march forward with other civilized nations. It is an earnest, too, of the introduction of other reforms of a far-reaching kind—reforms which will make China a better place for her own people to live in and a place wherein foreigners may live without apprehension under the jurisdiction of China rather than under the anomaly of extraterritoriality. The Draft of the Criminal Code was prepared by the Law Codification Commission, and, as was pointed out in a special article on the subject in the August issue of the FAR EASTERN REVIEW, is the legitimate successor of the "Provisional Criminal Code," which came into force with the Republic. It revolutionizes the treatment of criminals in China, and aims at remedying the defects in the Provisional Code which failed to conform to the more modern principles of jurisprudence now being applied to the criminal.

The Commission responsible for the Draft was composed of Tung Kan, Wang Chung-hui (Directors), Lo Wen-kan, Lu Hung-yi (Sub Directors), Shih Chi-chuan (Chief Compiler). Special reference must be made to Mr. Wang Chung-hui, D.C.L. (Yale), Barrister-at-law (England), who has given his close personal supervision to the work from its inception. Associated with him in this connection, was, among others, Mr. Lo Wen-kang, M.A. (Oxon), the ex-Procurator-General of the Republic.—THE EDITOR.

CHAPTER I.

APPLICATION OF CRIMINAL LAW.

Article 1. No act is an offence which is not expressly made punishable by the law in force at the time when it was done.

Article 2. If the law in force at the time when the trial takes place differs from the law in force at the time when the act was done, the law in force at the time when the trial takes place shall apply; Provided that where the punishment prescribed by the law in force at the time when the act was done is the lighter, such lighter punishment shall be inflicted.

Article 3. This Code shall apply to any offence committed within the territorial limits of the Republic.

An offence committed on board any vessel flying the flag of the Republic beyond the territorial limits of the Republic, shall be deemed to have been committed within the territorial limits of the Republic.

Article 4. An offence which is committed within the territorial limits of the Republic but which takes effect beyond the said territorial limits, or an offence which is committed beyond the territorial limits of the Republic but which takes effect within the said territorial limits, shall be deemed to have been committed within the territorial limits of the Republic.

Article 5. This Code shall apply to any one of the following offences committed beyond the territorial limits of the Republic:—

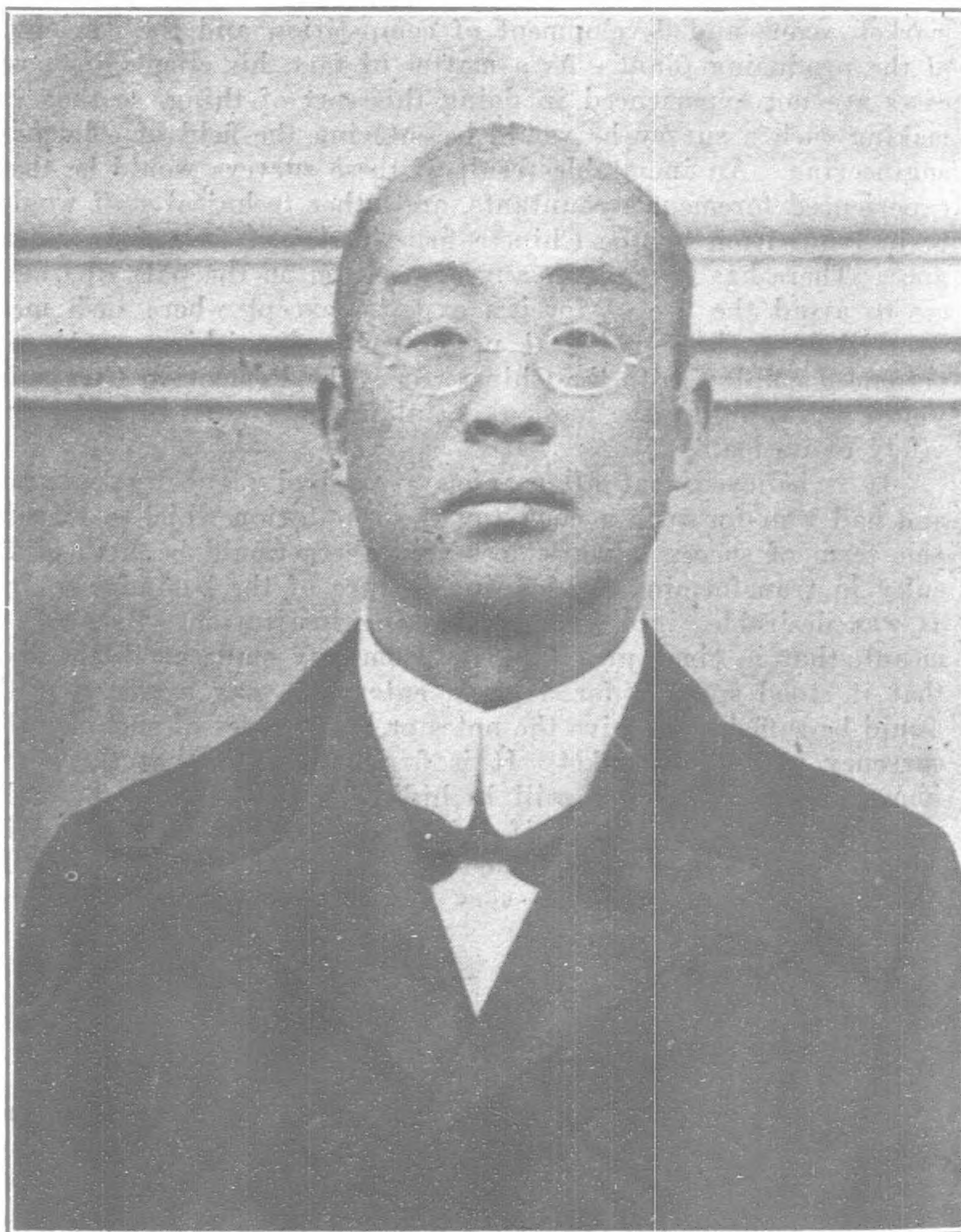
1. Offences against the President, as specified in Articles 91 and 92.
2. Offences against the internal security of the State, as specified in Articles 94 to 96.
3. Offences against the external security of the State, as specified in Articles 98 to 110.
4. Offences relating to false currency, as specified in Articles 204 to 209.

5. Offences relating to false documents and seals, as specified in Articles 219 to 221, 225, 227, and 229.

6. The offence of piracy, as specified in Articles 343 and 344.

Article 6. This Code shall apply to any one of the following offences committed by any public officer of the Republic beyond the territorial limits of the Republic:—

1. Offences relating to malfeasance in office, as specified in Articles 119, 120, 122, 124, 126, 127, 130, and 131.
2. Offences relating to escape of prisoners, as specified in Article 163.
3. Offences relating to false documents, as specified in Article 224.



TUNG KAN

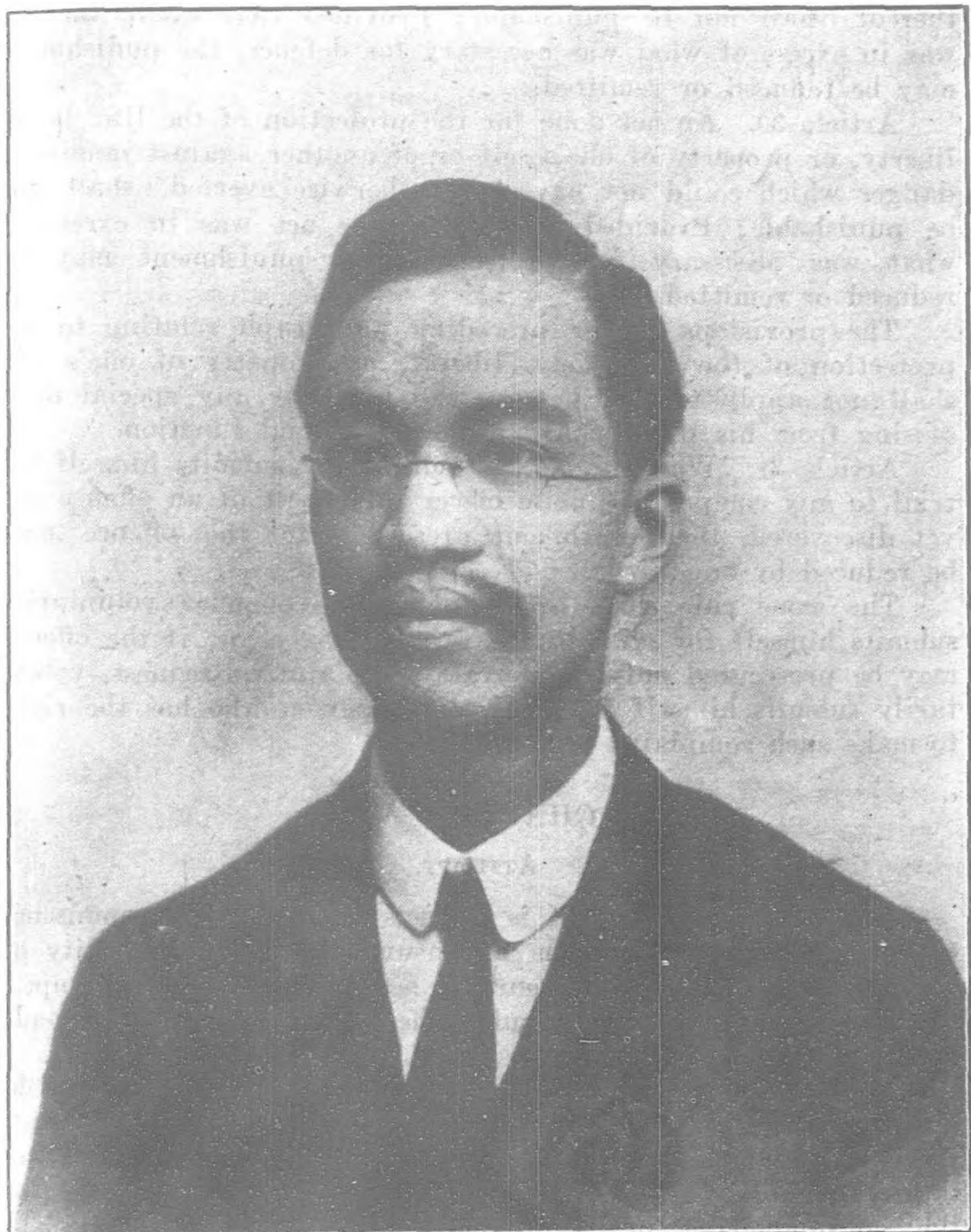
Director, Codification Committee

Article 7. This Code shall apply to any offence not provided for in the two last preceding Articles which is committed by any citizen of the Republic beyond the territorial limits of the Republic; Provided:—

1. That the minimum punishment for the offence is imprisonment for a definite period;
2. That the offence is punishable under the law in force at the place where it was committed; and
3. That the offender has not been acquitted by a final judgment of any tribunal in a foreign country, or, in case of conviction, that sentence has not been executed or remitted in the foreign country.

The provisions of the preceding paragraph shall apply *mutatis mutandis* to any person who not being a citizen of the Republic commits beyond the territorial limits of the Republic any offence under the said paragraph against any citizen of the Republic.

Article 8. Except as provided for in the last preceding Article, a final judgment of any tribunal in a foreign country shall be no bar to any criminal proceedings under this Code for one and the same act; Provided that where sentence has been executed or remitted in the foreign country, the punishment under this Code shall be reduced or remitted.



WANG CHUNG-HUI
Director, Codification Committee

Article 9. In the absence of any provision to the contrary, the General Provisions of this Code shall apply to any law which prescribes punishments.

CHAPTER II.

EXPLANATIONS.

Article 10. The words "not less than," "not lighter than," "not (nor) more than," and "within," denote that the figure or punishment stated in each case is inclusive.

Article 11. The words "lineal ascendant" denote any one of the following:—

1. Parents.
2. Grand-parents, great-grand-parents, great-great-grand-parents and upwards on the paternal side.
3. Grand-parents on the maternal side.

The words "collateral ascendant" denote any one of the following:—

1. Brothers of whole blood of the father, their wives, and unmarried sisters of whole blood of the father.
2. Brothers and sisters of whole blood of the mother.
3. Elder brothers and elder sisters of whole blood.

The relationships of ascendants specified in the two preceding paragraphs shall apply to an adopted person and his issue, to the same extent as if such relationships had been by blood.

A wife follows the husband in respect of his ascendants.

Article 12. The word "relative" denotes any ascendant as well as any one of the following:—

1. Husband or wife.
2. Relatives on the paternal side within the fourth degree.
3. Relatives on the maternal side within the third degree.
4. Relatives on the wife's side within the second degree.

A person is in lineal relationship with another when one of them is a direct ascendant or descendant of the other; a person is in collateral relationship with another when, not being in lineal relationship, he or his wife is a direct descendant from the same ancestor as the other.

The degree of relationship specified in paragraph 1 shall be reckoned in the following manner, that is to say, in the case of lineal relationship each intervening generation between one's self and another shall count as one degree; in the case of collateral relationship when the generations on the side of one's self or of one's wife and on the side of another are equal in number, the number of generations between one's self or one's wife and the common ancestor of such other person shall count as the number of degrees, or, when the generations on both sides are unequal in number, the greater number of generations shall count as the number of degrees.

Article 13. The words "public officer" denote a person in the Government service, or any person who exercises public functions under any law as a member of any deliberative assembly or as a commissioner or in any other capacity.

The words "public office" denote any place where a public officer exercises his public functions.

The words "public document" denote any document drawn up by any public officer or by any public office.

Article 14. The words "grievous bodily harm" denote any one of the following:—

1. Permanent deprivation of the power of sight of one or of both eyes.
2. Permanent deprivation of the power of hearing of one or of both ears.
3. Permanent deprivation of the power of speech.
4. Permanent deprivation of the power of movement of one or more limbs.
5. Permanent serious injury to body or to health.
6. Permanent serious disfigurement of the face.
7. Permanent injury to the genital organ.

CHAPTER III.

COMPUTATION OF TIME.

Article 15. A day consists of twenty-four hours, a month of thirty days, a year of twelve months.

In computing the period for which sentence has to be executed, a year means a calendar year.

Article 16. Any fractional part of the first day of a period shall be deemed to be one whole day; the last day of a period shall be one whole day.

The release of a prisoner shall take place before twelve o'clock noon on the day following the last day of the sentence.

Article 17. A sentence shall commence from the day when judgment becomes final.

Any time which has elapsed after judgment has become final and before the commencement of execution of sentence shall not be reckoned in the execution of the sentence.

CHAPTER IV.

CRIMINAL LIABILITY AND REDUCTION OR REMISSION OF PUNISHMENTS.

Article 18. An act not done intentionally shall not be punishable, except where negligence is specifically made punishable by law.

Article 19. An act is done intentionally when the offender knowingly and wilfully causes the accomplishment of the constituent elements of an offence.

An act is deemed to have been done intentionally when the offender could have foreseen that the act would accomplish the constituent elements of an offence and the accomplishment was not contrary to his will.

Article 20. An act is done by negligence when the offender not acting intentionally fails to exercise that degree of care which he should and could have exercised in the circumstances.

An act is deemed to have been done by negligence when the offender, notwithstanding that he could have foreseen the accomplishment of the constituent elements of an offence, honestly believed that the accomplishment would not take place.



LO WEN-KAN

Sub Director, Codification Committee

Article 21. Ignorance of law shall not discharge any person from criminal liability; Provided that the punishment may be reduced by one-half according to the nature and circumstances of the case.

Article 22. Where an increased punishment is prescribed on account of certain specified results, the increased punishment shall be inflicted only if such results could have been foreseen by the offender.

Article 23. An act done by any person who has not completed the twelfth year of his age, shall not be punishable; Provided that such person may, according to the nature and circumstances of the case, be sent to a reformatory or be placed in the care of his guardian, who shall be required to furnish security for a reasonable sum for the good behaviour of such person during a period of three years.

Where the offender has completed the twelfth and has not completed the sixteenth year of his age, or has completed the eightieth year of his age, the punishment may be reduced by one-half.

Article 24. An act done by any person who is insane, shall not be punishable; Provided that such person may, according to the nature and circumstances of the case, be subjected to measures restrictive of his liberty.

Where an act is done by any person who is feeble-minded, the punishment shall be reduced; Provided that such person may, according to the nature and circumstances of the case, be subjected upon execution or remission of sentence of measures restrictive of his liberty.

Article 25. The provisions of the last preceding Article shall apply to an act done by any person in a state of intoxication, except where intoxication was caused involuntarily.

Article 26. Where an act is done by any person who is deaf and dumb, the punishment shall be reduced.

Article 27. An act done in accordance with law or in pursuance of any lawful occupation, shall not be punishable.

Article 28. An act done by any public officer in the exercise of his public functions under the orders of his superior, shall not be punishable.

Article 29. An act done in defence of one's own rights or the rights of another against imminent unlawful infringement thereof, shall not be punishable; Provided that where the act was in excess of what was necessary for defence, the punishment may be reduced or remitted.

Article 30. An act done for the protection of the life, body, liberty, or property of one's self or of another against imminent danger which could not have been otherwise averted, shall not be punishable; Provided that where the act was in excess of what was necessary for protection, the punishment may be reduced or remitted.

The provisions of the preceding paragraph relating to the protection of the life, body, liberty, or property of one's self shall not apply to any person who is under any special duty arising from his profession or from his official function.

Article 31. Where a person voluntarily submits himself for trial to any competent public officer in respect of an offence not yet discovered, the punishment prescribed for the offence may be reduced by one-third.

The same rule shall apply where the offender voluntarily submits himself for trial to the injured party, or, if the offence may be prosecuted only on private complaint or request, voluntarily submits himself for trial to the person who has the right to make such complaint or request.

CHAPTER V.

ATTEMPT.

Article 32. An attempt is an act done in the commission of an offence which remains unconsummated. Impossibility of consummation does not prevent the act from being an attempt.

Attempt is punishable only where it is specifically made punishable by law.

Article 33. The punishment for attempt shall be the punishment prescribed for the consummation of the offence, which punishment may be reduced by one-half; Provided that where the means employed in the attempt were absolutely insufficient for the consummation of the offence, the punishment may be reduced or remitted.

Article 34. Where an offender having done an act in the commission of an offence voluntarily desists from its consummation, the punishment prescribed for the consummation of the offence shall be reduced or remitted.

CHAPTER VI.

PARTICIPATION IN THE COMMISSION OF AN OFFENCE.

Article 35. Where two or more persons act jointly in the commission of an offence, every such person is a principal offender.

Article 36. Whoever by inciting another causes such other to commit an offence, is an instigator. The same rule shall apply to whomsoever instigates another to be an instigator.

An instigator shall be liable to the punishment prescribed for the principal offender.

Article 37. Whoever assists a principal offender is an abettor.

Whoever instigates another to be an abettor shall be deemed to be an abettor.

An abettor shall be liable to the punishment prescribed for the principal offender reduced by one-half; Provided that where the abettor has rendered direct and material assistance during the commission of the offence, he shall be liable to the punishment prescribed for the principal offender.

Article 38. Whoever instigates or assists another to do an act which constitutes an offence only by reason of a special

status or position on the part of the doer of such act, shall be deemed to be an instigator or abettor, notwithstanding that he may not have the special status or position.

When increase, reduction, or remission of punishment is provided for an offender having a special status or position, the prescribed punishment irrespective of any such increase, reduction, or remission shall be inflicted on an offender not having the special status or position.

Article 39. Whoever knowingly assists a principal offender in the commission of an offence shall be deemed to be an abettor, notwithstanding that the principal offender had no knowledge of such assistance.

Article 40. Where two or more persons are jointly guilty of negligence in respect of an offence committed by negligence, every such person is a principal offender in respect of such offence.

CHAPTER VII. PUNISHMENTS.

Article 41. Punishments are either principal or accessory. Principal punishments are:—

1. Death.
2. Imprisonment for life.
3. Imprisonment for a definite period.....of not less than two months nor more than fifteen years; except in case of reduction of punishment when the period may be reduced to less than two months, or in case of increase of punishment when the period may be extended to twenty years.
4. Detentionof not less than one day and less than two months; except in case of increase of punishment when the period may be extended to more than two months.
5. Fineof not less than one yuan.

Accessory punishments are:—

1. Deprivation of civic rights
2. Suspension of civic rights.
3. Forfeiture.

Article 42. Where the principal punishment is remitted in accordance with Article 8, deprivation of civic rights may be inflicted independently of any principal punishment.

Where the principal punishment is remitted, forfeiture may be inflicted independently of any principal punishment.

Article 43. The degree of severity of principal punishments shall be in the order provided for in Article 41.

As between two or more death penalties or as between two or more punishments of imprisonment for life, the degree of the severity of the punishments shall be determined according to the gravity of the offence.

As between punishments of the same nature, that punishment of which the maximum period or the maximum amount is the longer or the greater, shall be deemed to be the severer; where the maximum periods or the maximum amounts are equal, that punishment of which the minimum period or the minimum amount is the longer or the greater, shall be deemed to be the severer.

Where the maximum periods or the maximum amounts are equal and the minimum periods or the minimum amounts are likewise equal, the degree of the severity of the punishments shall be determined according to the gravity of the offence.

Article 44. The death penalty shall be executed by strangulation within the precincts of a prison.

No death penalty may be executed without confirmation by the Ministry of Justice.

Article 45. Persons sentenced to imprisonment or to detention shall be confined in a prison.

Persons sentenced to imprisonment or to detention shall be required to perform labour; persons sentenced to detention may, according to the nature and circumstances of the case, be exempted from the performance of labour.

Article 46. Fines shall be paid within one month after judgment has become final; payments by instalments limited to one year may be permitted according to the nature and circumstances of the case.



LU HUNG-YI

Sub-Director, Codification Committee

In default of payment of fine after expiration of the period of payment, the fine shall be levied by compulsory measures, except where it is evident that the offender is unable to pay.

Fines remaining unpaid shall be commuted to detention in default of payment of fine at the rate of from one to three yuan for one day; Provided that in no case shall detention in default of payment of fine exceed one year.

Before expiration of the period of payment detention in default of payment of fine may with the consent of the offender be executed.

The period of detention in default of payment of fine shall be fixed by the judgment.

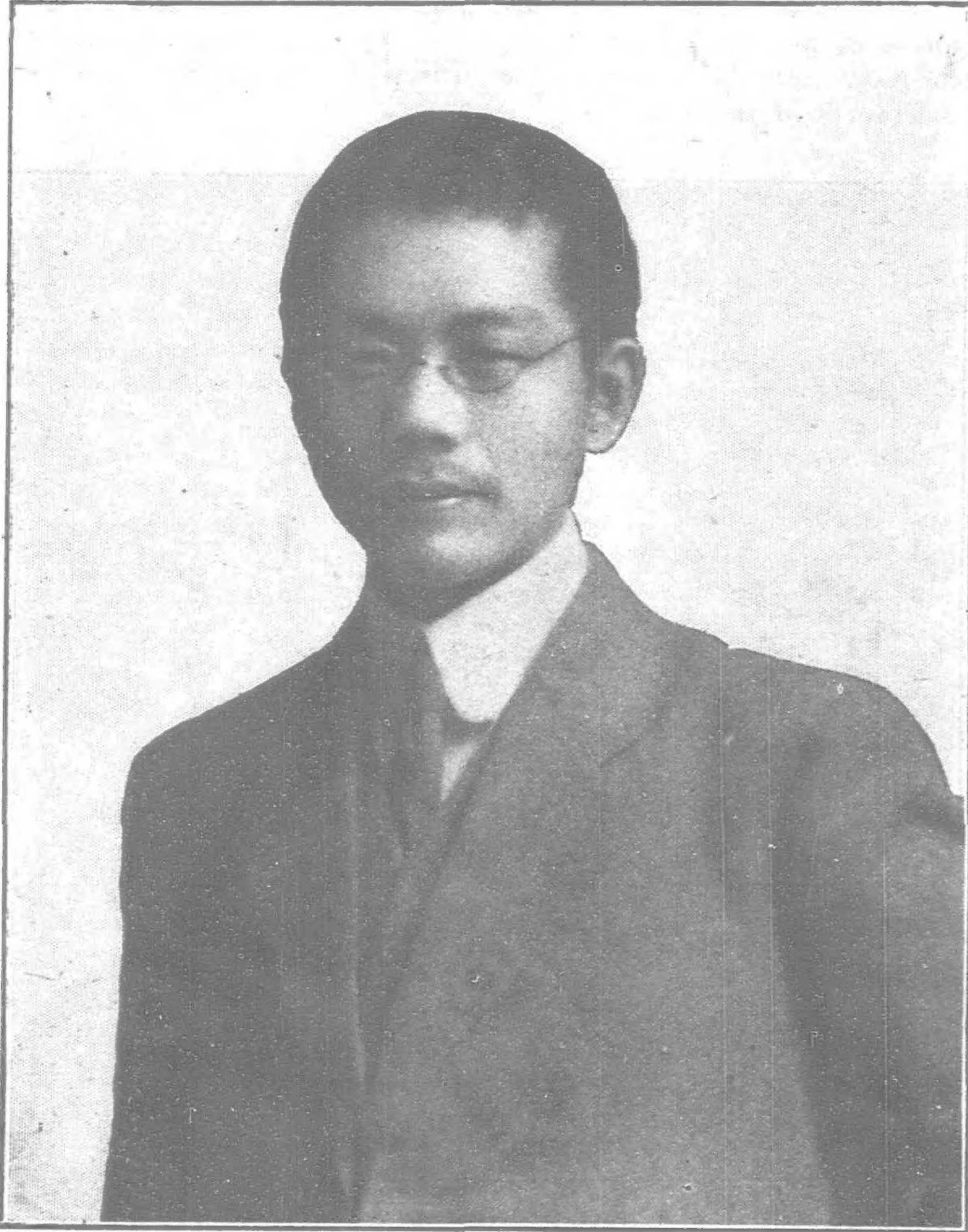
Detention in default of payment of fine shall be executed in a section of the prison provided for that purpose.

Persons sentenced to detention in default of payment of fine shall be required to perform labour; Provided that exemption may be granted according to the nature and circumstances of the case.

After expiration of the period of payment detention in default of payment of fine shall be executed; permission for payment by instalments may be withdrawn.

Payments made during the period of detention in default of payment of fine shall be reckoned as equivalent to the number of days of detention at the rate fixed as the measure of commutation.

Where according to the rate fixed as the measure of commutation the total amount of fine exceeds the total number of days in one year, commutation shall be in the proportion that the total amount of fine bears to the total number of days in one year.



SHIH CHI-CHUAN

Chief Compiler, Codification Committee

No payment shall be made of any sum of money less than the amount equivalent to one day of detention in default of payment of fine; no fractional part of a day of detention in default of payment of fine shall be reckoned.

Article 47. Deprivation of civic rights shall extend to the deprivation of the following:—

1. The right to hold any public office.
2. The right to vote or to be a candidate at any national or local election authorized by law.
3. The right to receive any order or any decoration.
4. The right to serve in the army or in the navy.
5. The right to hold any position as principal, as administrative officer, or as teacher in any Government or public educational institution.
6. The right to be an advocate.

Deprivation of civic rights may be for life or for a definite period.

Deprivation of civic rights for a definite period shall be for a period of not less than one year nor more than fifteen years.

In case of sentence of death or of imprisonment for life, deprivation of civic rights shall be for life.

In case of sentence of imprisonment for a period of not less than ten years, deprivation of civic rights shall be for life or for a definite period.

In case of sentence of imprisonment for a period of not less than six months and less than ten years deprivation of civic rights may not exceed ten years.

In case of sentence of imprisonment for a period of less than six months, or of detention, or of fine, deprivation of civic rights may not be inflicted.

In case of an offence committed by negligence, deprivation of civic rights may not be inflicted.

Deprivation of civic rights shall be pronounced in the judgment.

Deprivation of civic rights shall take effect from the time when judgment becomes final; the period of deprivation shall commence from the day when sentence has been executed or remitted.

Article 48. In case of sentence of imprisonment for a definite period without deprivation of civic rights, the civic rights mentioned in paragraph 1 of the last preceding Article shall be suspended during execution of sentence.

Article 49. The following are subject to forfeiture:—

1. Things, the possession, manufacture, or ownership of which is forbidden.
2. Things used in the commission of or in preparation for the commission of an offence.
3. Things acquired through the commission of an offence.

Things specified in No. 1 of the preceding paragraph shall be forfeited whether they do or do not belong to the offender; things specified in Nos. 2 and 3 of the preceding paragraph may be forfeited only if they belong to the offender.

Except the things specified in No. 1 of paragraph 1, forfeiture for an offence of which the maximum punishment is detention or fine may not be inflicted in the absence of any provision to that effect.

All forfeitures shall be pronounced in the judgment.

In the case of things which are to be forfeited whether they do or do not belong to the offender, forfeiture may be inflicted independently of any principal punishment.

Article 50. The number of days for which an offender has been held in custody prior to the time when judgment becomes final, shall be reckoned in the reduction of the period of imprisonment or of detention or in the reduction of the amount of fine, at the rate of two days in custody for one day of imprisonment or for one day of detention or for one yuan.

CHAPTER VIII.

RECIDIVE.

Article 51. Whoever within five years after execution of a sentence of imprisonment for a definite period or after remission of punishment in case of partial execution of a sentence of imprisonment for life or for a definite period commits a subsequent offence punishable with imprisonment for a definite period or with any heavier punishment, is said to commit recidive.

Article 52. Whoever is found guilty of a first recidive in respect of offences not of the same nature or of offences not specified in the same number in the following list, shall be liable to the punishment prescribed for the second offence increased by one-third; whoever is found guilty of a second or of any subsequent recidive in respect of offences not of the same nature or of offences not specified in the same number in the following list, shall be liable to the punishment prescribed for the second or for the subsequent offence increased by one-half.

Whoever is found guilty of a first recidive in respect of offences of the same nature or of offences specified in the same number in the following list, shall be liable to the punishment prescribed for the second offence increased by one-half; whoever is found guilty of a second or of any subsequent recidive in respect of offences of the same nature or of offences specified in the same number in the following list, shall be liable to double the punishment prescribed for the second or for the subsequent offence.

1. Offences against the President, offences against the internal security of the State, offences against the external security of the State, and offences against friendly relations with foreign states.
2. Offences relating to malfeasance in office, offences against the lawful discharge of public functions, offences relating to elections, and offences against public order.

(Continued on page 660)

Will the Independent Filipino Maintain American Administrative Standards?

Curtailment of the Activities of the Bureau of Science Justifies Fears of a Backslide.

When the American Government set itself enthusiastically to work to show the Filipino how to improve himself and his country neither money nor men were spared to make the lesson a telling and effective one. Scientists and others qualified to lead the native along the road of modern progress were selected and des-



DR. ALVIN J. COX
Retiring Director, Philippine Bureau of Science

patched to Manila, without thought of cost, to lay plans effectively to impart the requisite knowledge. What America had learned from experience in the development of the great spaces of her own territory, plus what scientific development the world over had taught, was lavishly applied in the Philippines. Organizations were created to handle various aspects of development, and in due course departments existed for the proper consideration and treatment of every question and problem embraced in the task of elevating the Filipino and equipping him to become prosperous, self-governing, and independent according to modern standards and American lights and ideals.

Education along every possible line was liberally provided, the country was opened up by roads and railways, markets were developed, natural resources were investigated by specialists, and provision was made to aid everyone engaged in exploiting those

resources to understand the nature of their task, to improve their methods and enhance the value of their product, and in general to develop the highest possible efficiency.

No one can gainsay the fact that American money and enterprise have done extraordinary things to push the Filipino up the commercial, industrial, social, and political ladder. Conditions in the Philippine Islands to-day are not to be compared with what they were when the guns of Dewey blazed across Manila Bay and the fleet of the Spaniards went down with bubble and groan off the Cavite shore. At that period the Filipino—or all except a fortunate few of him—wallowed in his native ignorance and his tropical filth. Now he can, if he likes, bask amid every advantage and blessing that modern science can invoke, and, in Manila and big cities, at all events, he may “jazz” to his heart’s content for recreation and pull chilled concoctions through straws at elaborate soda-fountains for refreshment.

He has learned the value and uses of good city government, of roads, and artesian wells, and hygiene, and innumerable aids to a better life—as well as the importance of a home run in base ball and a knock-out in boxing.

He can fill his head according to the best educational curricula, and cover his form with Fifth Avenue fashion in sartorial adornment—and he has imbibed to the full each and all of the sublime delights of joy riding in motor cars on rosy evenings over tarred highways traversing seductive tropical scenery.

He is to-day the possessor of opportunities such as he never dreamed of in the old Spanish times, and he is on the eve of securing political emancipation which he has long cherished but which he certainly would never have attained in so short a time if it had not been for American enthusiasm and idealism and altruism.

The question is, What will the Filipino do with the powers which self-government will place in his hands?

Will he backslide?

Will he fall down on his job of maintaining modern standards in the numerous and necessary administrative departments which American thoroughness set up?

Will the roads revert to ruts and sloughs, and the cleansing squad of the sanitary departments leave the garbage of to-day to become the filth of to-morrow?

Will the magnificent work done to improve native products be continued or will it fall into desuetude?

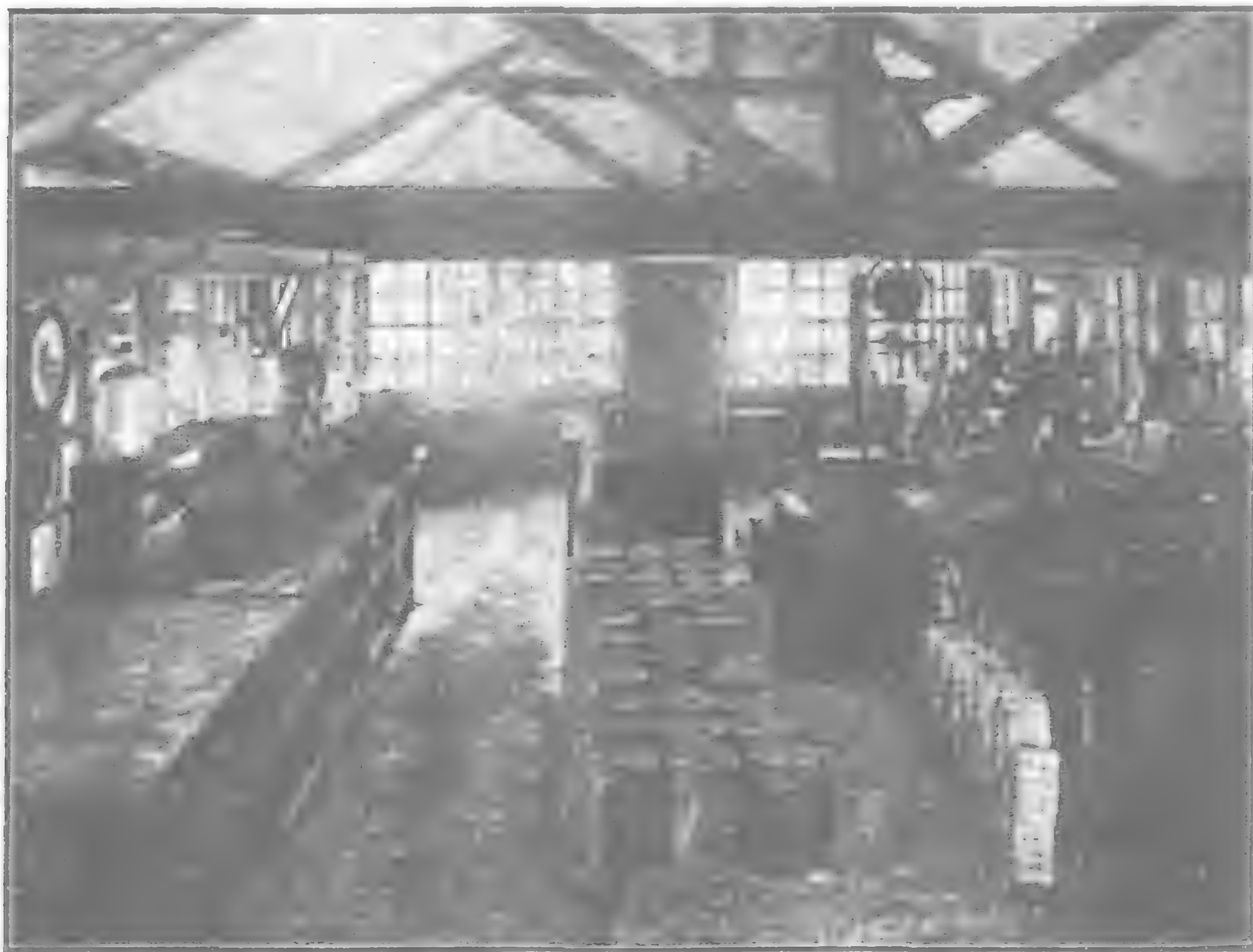
Will there be stagnation or continued progress?

Will the Filipino respond to America’s valedictory deontological discourse?

In short, Will he “say put”?

These are a few of the questions which naturally occur to one who has seen the Philippines in the old days and who has revisited them after an interval of some sixteen years—an interval devoted by the Americans to cleaning up, improving, constructing, rebuilding. On every hand there is striking evidence of the practical work that has been done. In the varied improvements to be seen in the Islands America has erected herself a monument and has provided the Filipinos with substantial proof of generous guardianship as well as durable foundations upon which to develop national greatness and economic prosperity. Seeing all this as it is under American management the pessimist is prone to wonder whether it has been in vain; whether, after all, the croak of the Jeremiah will be justified—the croak that the Oriental is incapable of sustained effort on Occidental standards, and that the discipline that is so essential in the

maintenance of a modern organization will gradually disappear upon the withdrawal of foreign supervision and control. That point will be definitely settled before long for the simple reason that the Filipinos will be given the chance to run their own ad-



BUREAU OF SCIENCE CEMENT LABORATORY IN 1913

ministration. They will eventually demonstrate whether the changes which American energy and enterprise have effected were forced like hot house plants, or whether the Filipinos really responded spontaneously to the desire of the Americans to help them on their national feet, and will, when the guiding hand is removed, continue advancing of their own volition.

Reflection on these lines is prompted by the fear that is voiced in the Philippines by foreigners that opportunity for expanding trade and commerce will be reduced to a minimum; by the evidence that is provided in the case of the Bureau of Science, where the pruning knife is already being applied and the efficiency of that Bureau is being threatened. This is a specific case which is worthy of particular mention, because the Bureau of Science is probably the most important organization set up in the Philippine Islands. It has unquestionably done more for the Philippines than any other Department, not only in the way of

investigating and making known the natural resources of the islands and inspiring their exploitation systematically and scientifically, but in making known the value of Philippine products to the outside world. If any Department in the Islands should be kept at its highest pitch it is the Bureau of Science, yet its usefulness is being diminished at a time when no effort should be spared to extend its operations.

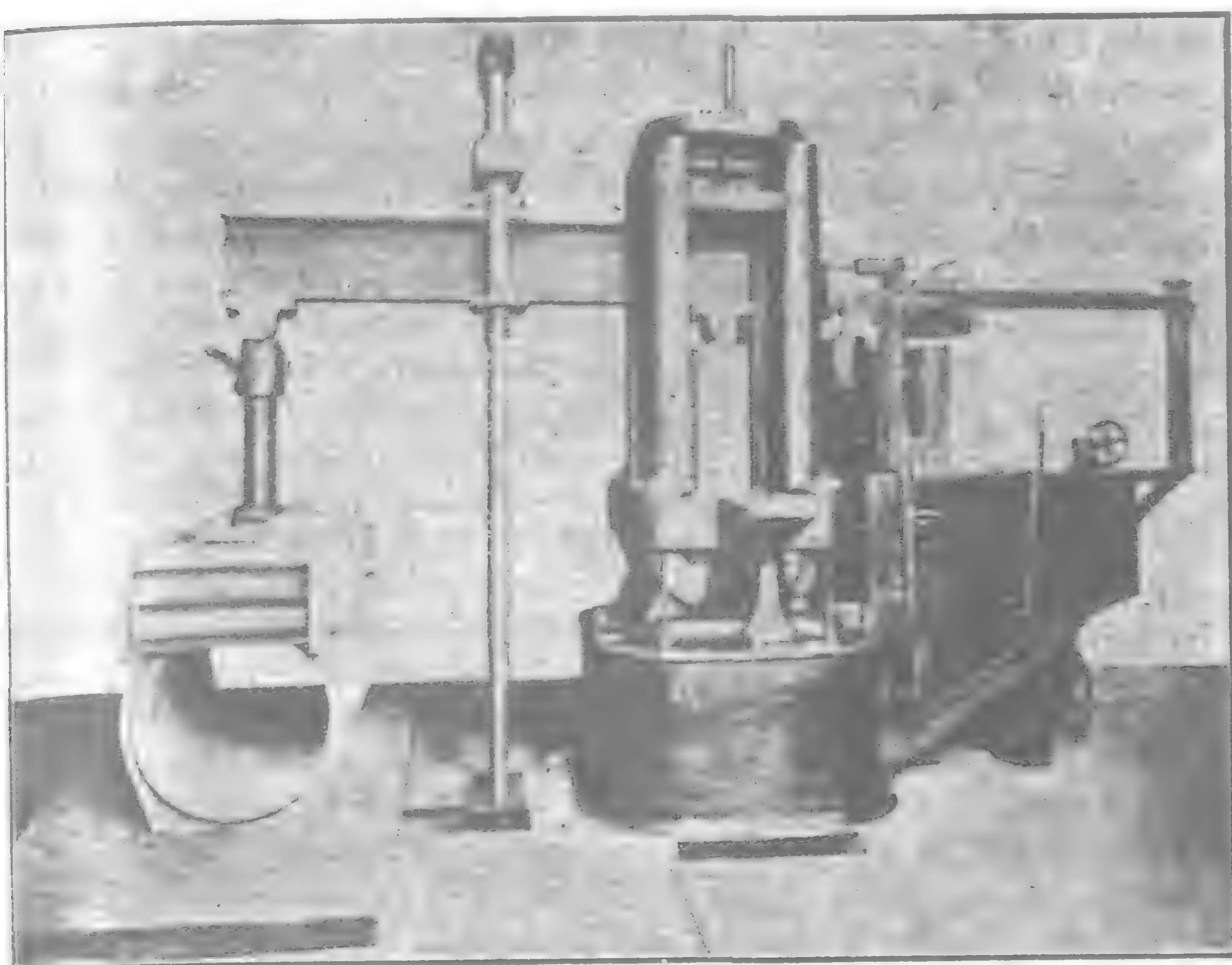
In the possession of such a Bureau the Philippines almost stand alone, for there work which other Governments have done by different departments is centralized. Nor can the Philippines do without the services of the Bureau if they are to develop as they should along sanitary, industrial and economic lines. While monumental work has been achieved in overcoming some tropical diseases there are still many which should be thoroughly investigated with the object of discovering remedies. Industries abound which could be developed from their primitive stages, and there are abundant sources of wealth to be opened up and scientifically examined. An enormous amount of bacteriological work in the shape of examinations of waters and foods, routine microscopical examinations of blood, etc., is continually being done. The microscopical work is performed for the purpose of the early identification of infectious diseases, such as cholera, bubonic plague, typhoid fever, leprosy, tuberculosis, malaria, worms, genito-urinary diseases, etc. The entire islands are dependent upon the serum laboratory of the Bureau of Science for the supply of serum and of vaccine virus. Enough vaccine virus is produced annually to vaccinate two million people against smallpox. A large amount of other work is done on dysenteries, the activity of drugs and chemicals as a basis for the treatment of various diseases, sanitary surveys, investigation for pathogenic organisms and insects concerned in the transmission of diseases. The scientists have solved the problems of a large number of tropical diseases with regard to the causes, prevention and treatment that have baffled specialists all over the world for many years. All this work is ultimately to assist health conditions in the Philippine Islands, while the biological work has been a large factor in successfully combating epidemic and other diseases in the Islands.

The study of medicinal and agricultural plants involves general work on all phases of Philippine botany. Philippine forests contain many species of plants that produce fibres, timbers, gums, resins, dyes, etc., of economic value. The botanical names of these and detailed information as to their soil and moisture requirements, rates of growth, distribution, etc., are needed in order that the greatest use can be made of them. The task of assembling material to represent practically a complete flora of the archipelago is an enormous one, and the need of continued



MAIN BUILDING, BUREAU OF SCIENCE, MANILA

exploration is urgent. The study of fungi is an extremely important branch of Philippine botany, while economic work in entomology involves the control of flies, mosquitoes, and other insects that are known to be carriers of disease and of the many species of insects injurious to forests, fruit trees, agricultural crops, etc. The silk worm has been introduced into the Islands by the Bureau of Science, which supplies eggs and instructions to those who wish to produce silk. The Bureau has done all that the limited personnel would permit to stimulate the economic fisheries industries. Deep sea fishing has been developed by improving methods of capture and marketing and means for drying, salting and canning surplus stock.



TESTING MACHINE BREAKING CONCRETE PIPES

In the inorganic laboratories innumerable tests are made annually of cement, reinforcing iron, steel, rope, wire, ties, road material, cement pipes, concrete, mortar, building blocks, bricks, piles, tiles, stones, cloth, and other similar materials. Analyses are made of clays, rocks, minerals, soils, fertilizers, iron and steel, paints, pigments, metals and alloys, mixed paints, electric batteries, crude chemicals, etc., for the various branches of the government, provinces, municipalities, and the United States Army, for private parties, and for general purposes. The assaying of ores is also carried on. The standardization of weights and measures is a regular duty of the Bureau. The organic chemists have carried on a large amount of research work on beri-beri and its prevention and cure, and on the composition and characteristics of Philippine fruits, copra production, papaya gum, perfumes and essential oils from native plants, etc. Chemical analyses of paper, textiles, oils, soaps, etc., are performed. The Bureau's sugar laboratory at Iloilo is engaged in unipolar polarisations of sugar and in the instruction of planters as to the best methods of cutting cane, sugar boiling, operating mills, etc.

The larger part of the time of the geologists of the Bureau has been devoted to engineering geology, economic geology of metallic and non-metallic minerals, geologic reconnaissance and topography, and geology mapping. The geology, field relations, and economic aspects of coal, asbestos, gold, sulphur, petroleum, artesian water, road metal, iron ore, building stone, soils, raw minerals for clay products, Portland and natural cement, and lime have been studied.

The Bureau has determined the properties and some of the uses of oils produced from lumbang, kapok, cashew, castor, bean, tree-cotton seed, physic nut, pili, calumpang, and cato. It has shown conclusively that papaya gum made in the Philippines is equal, if not superior, both regarding color and activity, to any now in the world's market. The suitability of waste from abaca, or Manila hemp, cogon grass, and various other substances, including bamboo, for paper pulp has also been demonstrated.

In general the Bureau endeavors to be of the greatest assistance to manufacturers, producers, miners, planters and public health workers by making reports and giving expert advice on crops, soils, fertilizers, plant diseases, insect pests, mining, etc., and in performing analyses and examinations of sugar, soils, fertilizers, waters, coal, metals and alloys, gums, resins, minerals, cement, food products, biological and pathological specimens for practitioners and for the various branches of the Government, of other materials of agricultural, industrial, and medical use and interest.

The work of the Bureau has not stopped with the examinations mentioned above. It has published extremely valuable bulletins on all subjects, those on the scope of the commercial utilization of Philippine economic products being especially important, and invaluable to investors in the Philippines and to others directly or indirectly interested in the Islands.

This glance at the scope and importance of the work undertaken and accomplished by the Bureau should be sufficient to convince anyone interested in such a great field of endeavor as the Philippines of the vital necessity of maintaining the Bureau at fullest efficiency. A visit to the Bureau itself impresses one more strongly than ever just how great its relationship is to proper Philippine development. While the 1918 report of the Director mentions regretfully the shortage of efficient technical personnel, the fact remains that the different departments of the Bureau have so far been kept up in a highly creditable manner. That this is due in large manner to the personal enthusiasm of the Director, Dr. Alvin J. Cox, who, in the report, notifies his retirement from the service, goes almost without saying. In Dr. Cox the Philippines Government had a scientist whose heart was in his work, whose mind was constantly absorbed in the economic and sanitary problems of the Islands, whose energies were devoted to the advancement of the Philippines with a singleness of purpose which was remarkable. To him, more than to anyone else, the success of the Bureau during recent years is attributable, and why the Government would even contemplate allowing such a man to leave its service is beyond understanding. So great has the work been which Dr. Cox has done in making the products of the Philippines known to the world, so exhaustive have his scientific researches been, so valuable and popular his publications, that his mere continued presence in the Islands, even if he never again worked in his laboratory, would be of immense value to the Government in the introduction of capital for economic development. Dr. Cox went to the Philippines in 1906 and became Director of the Bureau in 1914, after serving as Acting Director from 1912, and if the Filipinos have any sense they will not now allow him to retire. He is worth too much to them as an asset. But if he is permitted to go back to his own country, for which no doubt he thirsts, then his recommendations concerning the



INTERIOR OF A SILK HOUSE, SHOWING ANT-PROOF RACKS FOR THE SILKWORMS

Bureau should be carried out in their entirety. In his 1918 report he concludes as follows:—

"The Bureau of Science is an efficient working organization and should be maintained so. To do this the Bureau must have efficient technical personnel; and, in order to retain that which it now has, and to secure additional men, recognition must be given in the higher positions. The Bureau of Science needs additional specialists in all its branches, especially in geology and industrial chemistry, to care for the rapidly developing mineral and economic industries. Without the employment of these there is grave danger that the development by the Government of such industries in the Philippine Islands will be discredited if not an entire failure. Much important constructive work in the Bureau of Science that should have been done has remained undone for lack of personnel, and there is the keenest need for extending economic research in every line.



SECOND STORY OF MUSEUM, LOOKING NORTH FROM THE CENTER

"With regard to the specific needs of the Bureau of Science, many of those that I have pointed out in former reports have not yet been realized, but the necessity is as keen as ever. I desire especially to call attention to my former requests for funds for a commercial marine and fresh-water products (fisheries) laboratory, survey, and hatchery; the appointment of an entomologist to carry on work involving the co-operation between bacteriologists, marine biologists, and others; the technical education of Filipinos in the United States; the utilization of powdered coal for fuel; the extension of the work of the Iloilo sugar laboratory; additional chemists and pharmacists for the investigation of promising medicinal and poisonous plants that have not as yet been investigated; a field survey of Philippine water supplies; a soil survey; enlargement of the plant for the preparation of extract of tikitiki for the treatment of infantile beri-beri; investigation of the subject of animal diseases and insects injurious to agricultural products; the provision of demonstrators for propaganda work, etc. There is a wealth in the Philippine Islands that remains untouched due primarily to inadequate investigation. Unless work along the lines indicated is done much valuable work already completed by the Bureau will become ineffective. Successful economic development of the Philippines must be preceded by adequate research, and economic independence must precede successful political independence."

Here, then, is a direct chance for the Filipinos to give evidence of their ultimate intentions after self-government is vouchsafed them. Already they are in the position to enhance the importance of the Bureau of Science or cripple it, and it would appear that the latter course is unhappily being adopted. If departments with such important functions as those of the Bureau of Science are pruned immediately the Filipino feels brief authority, why then are the Americans with vested interests in the Philippines not justified in posing the questions listed in the early part of this article?

Grand Canal Improvement Work

With the arrival of Mr. John R. Freeman, who comes to China in connection with the projected improvement of the northern section of the Grand Canal, something definite can be expected in the way of plans for the carrying out of the scheme. So far engineers have been busy at work investigating the area which will be affected by the proposed improvements and they are at present engaged working up their field notes. Hydrographic parties are still making observations during flood stages of the Canal and rivers, and when this and other data have been worked into shape Mr. Freeman will have something definite to go upon in making his decision as to the nature and scope of the work to be undertaken.

Readers of the FAR EASTERN REVIEW will remember that the contract for this work was granted the Siems Carey Railway and Canal Company, the financing of the project to be undertaken by the American International Financial Corporation and Japanese financiers. The work entailed in the contract is merely a small part of what is necessary to make the watercourses of North China properly navigable, while a stupendous task is ahead if the whole of the canals and rivers of merely the littoral provinces are ever to be renovated, as they ought to be, and as they some day will be. Already a start has been made, with this great problem in view, by the creation of the Commission for the Improvement of the River System of Chihli Province, of which something is said elsewhere in this issue. This Commission has nothing to do with the improvement work now contemplated on the Grand Canal but it takes into consideration the remaining canals and rivers so far as Chihli Province is concerned. No doubt its scope will greatly enlarge, and if the Commission is conducted wisely there is no reason why it should not become a tremendous power for good in China.

That a systematised effort is under way to improve the northern section of the Grand Canal is valuable as an object lesson in connection with the possible improvement of other water courses. There are thousands of miles of canal in China. The Chinese have dug up their great plains until all Eastern China is a vast web of waterways. Canal digging, it is recorded, commenced with the semi-divine Emperor Yao, who flourished some 4,100 years ago, and who is said to have given thirteen years of indefatigable labor to irrigation and the improvement of agricultural implements and products.

When the capital of the Empire was at Chang An, the great ambition of the proud old Emperors was to connect up the waterways so they could travel to the coast, more than 1,000 miles away, in their pleasure boats. History records that the first man to achieve this end was Yang Ti, who ruled about 605 A.D., and who cut the first channel for the Grand Canal which American dredges are now to retrieve from accumulated silt and sand. Yang Ti inherited from a serious-minded and thrifty father, whom he murdered by the way, an enormous fortune which he squandered on building enterprises and military expeditions. After building forty wayside palaces throughout the Empire, Yang Ti spent his time touring the country. His travels were the root of much road making and canal digging, and his military ambitions led him to start the Grand Canal. In a campaign against Korea he found difficulty in getting provisions and reinforcements from the South, so he began at his military base at Chochun, in Shantung, and opened a waterway in four sections to the Yangtze River. Later Emperors lost interest in the long ditch and it fell into decay and disuse until, when the Mongols conquered China, Kublai Khan, whom Marco Polo and Coleridge have immortalized, each in his own way, reopened it in 1282 A.D., and extended it north to Peking. The Manchus, with characteristic neglect, allowed the Canal to fill itself with silt and sand, and in lengthy parts to become absolutely impossible for navigation. Not until the American Red Cross began to take a practical interest in the causes of floods and famine in certain sections of China was proper attention given to the restoration of the Canal, and the work that is now proceeding is the outcome of their efforts along the line of practical philanthropy.

Foreign Concessions in China

The efforts of the Austrians to retrieve their Concessions in China through the Peace Treaty has once again raised in the minds of residents of foreign countries who know nothing of China—and they are legion—doubts as to what a "Concession" really is. Most people abroad believe a concession in wondrously wealthy China to be nothing more or less than some sort of a money-making grant, the development or exploitation of which endows the owners with fabulous riches. Those who know China are aware, of course, that such is not always the case, and that the "Concession" usually referred to in this or that Chinese port is merely the place set apart for foreign residence. China has been described as the land of anomalies, and if that is true it is likewise true that the foreign Concession and Settlement constitute the greatest of the anomalies.

In a typical foreign Concession or Settlement it is difficult to realize from general impressions that one is in China at all. The architecture, the street scheme and the shop signs so closely resemble those of American or European towns that it is not until the oriental touch is given by an enthusiastic rickshaw puller measuring his pace against an electric tram or some such incident that it is recalled, that though this corner of the stage is modern, the stage itself is so old that the investigator after pursuing its history back for thousands of years abandons his task in despair, unable to separate the authentic from the legendary.

But it is not only in its outward appearance that the foreign Concession, or rather that portion of it chiefly occupied by foreigners, differs sharply from its surroundings. The foreigner lives his life in China much as he would in his own country, his social customs are unchanged and there is only the faintest evidence that his way of thought has been influenced by contact with a very old and, in many ways, advanced civilization. It might be imagined that association in commercial and educational work would lead to close social intercourse between the foreigner and the Chinese. It rarely does. There is, of course, some exchange of social courtesies, but it is characterized more by ceremony than cordiality. Mutual liking and respect are not infrequently entertained, but there is a barrier not the less real because it is intangible. The two civilizations appear upon superficial observation to be merged in the foreign Settlements, but in reality they only overlap.

As the expression "Foreign Concession" conveys a wrong idea to the reader who has never been in China, its origin may be explained. Originally, when China, much to her unconcealed disgust, had to consent to the opening of some of her ports to foreign trade, certain sites were set apart for the use of foreign officials and merchants. Perhaps it is well to explain that "ports" is used in a very broad sense. A port, in the ordinary acceptance of the term, is a city or town possessing a harbor, but in China the expression "Treaty Port" is employed to describe any place, either on the coast or far inland, that has been thrown open to foreign trade, and where, consequently, foreigners are allowed to form a settlement. Originally it was intended that the settlements should be occupied only by foreigners and such Chinese employees as would be necessary. In course of time, however, the Chinese realized that the Settlements were not only more efficiently policed than the neighboring districts under Chinese control, but were safe havens of refuge when civil dissension rendered life and property insecure. During the Taiping rebellion tens of thousands of terrified fugitives sought sanctuary in Shanghai, and ever since the right of Chinese to reside in the Settlements has been little restricted.

The foreign Settlements, therefore, would be more accurately described as "Sino-foreign," as, as a general rule, the Chinese population greatly outnumbers the foreign. Many difficult problems have resulted. To permit a purely Chinese legal tribunal to officiate in the foreign Settlements would be against the letter and the spirit of the treaties to which they owe their

existence. The foreigner is bound by the laws of his own country, and is liable for any offence to be tried by courts in which that law is administered by judicial officials of his own nationality. But in what manner was a Chinese offender to be dealt with? He could not legally be tried in one of the American or European courts as he was not subject to their jurisdiction. The difficulty was mitigated, if not overcome, by the establishment of quaint tribunals called, appropriately enough, Mixed Courts. In these a polyglot sort of law is administered which probably results, on a rough average, upon virtue receiving its reward and vice its punishment. The Mixed Courts are presided over by a Chinese Magistrate who is assisted by foreign assessors. In the early days it was found difficult to convince the Magistrate that disapproval of a witness's ideas of sartorial adornment hardly justified a command for his immediate decapitation, but eventually the Courts became useful auxiliaries in maintaining orderly conditions.

The Chinese regard the Settlements from two distinct points of view. Their national pride is offended by these perpetual reminders that their laws do not run even in portions of their own territory, and that in some respects their civilization is deemed to be inferior. On the other hand, when the voice of rebellion is heard in the land, and continued residence under Chinese jurisdiction is an invitation to disaster, they realize to the full the benefit of these easily accessible refuges where they are perfectly secure under the shadow of extra-territoriality. To the recognition of the value of the Settlements in this respect is mainly due the scrupulous care with which, when risings against the Government of China take place, both loyalists and insurgents abstain from action calculated to injure or offend the foreigner. On the whole, therefore, the Chinese, being an eminently practical race, probably consider that the violation of national sentiment caused by the existence of the Settlements, is more than compensated for by the material advantage of having numerous storm-shelters close at hand when, as all too frequently happens, internal political disputes are settled by the arbitrament of the sword. In any event the Settlements will remain in existence until Chinese law and law administrators are improved by the Occidental conception of the rights of the individual.

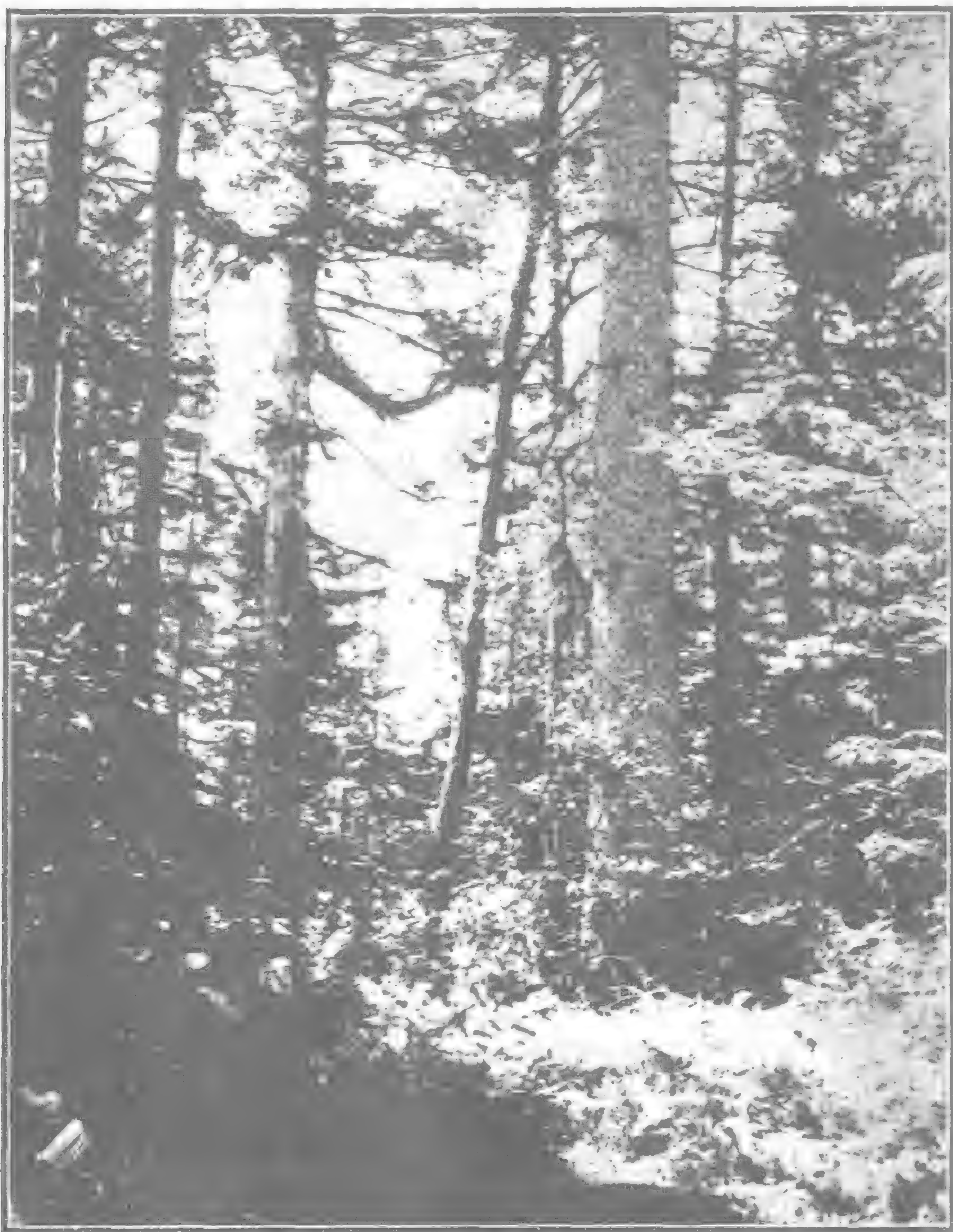
Depreciated Coin in Anhui

The proposal to reopen the Mint at Anking, the capital of Anhui Province, China, is regarded with suspicion by people who know the many devices which are open to provincial officials to expand their desire for squeeze. The correspondent of the "North-China Daily News" at Anking asks, Why open the Mint at all? And that question leads him on to give some information about currency matters in the region which might be of interest. The Mint was, he writes, "open before, and the dollars minted there were the cheapest in Anking. Even Hongkong dollars took precedence. Doubtless it was a better dollar, but that was not all the reason there was for confidence. Of all the coinage inflicted on us here, the Yuan Shih-kai dollar and parts thereof are as successful as any. That man did things. There is no reason in the world why our mint should be restarted. It is to make copper coins. We have plenty. There is no scarcity, and the exchange has been very steady. For a long time the dollar has brought 1,380 cash, or rather 138 ten-cash pieces. If the mint opens, we'll probably get more, but it will be a misfortune. Last year the place was flooded with 20-cash pieces. After a short time they fetched 18 cash. Toward the end of the year their value was 15 cash, and now it is difficult to get 8 cash for one. In all that depreciation some one suffers, and who gains? Tens of thousands of those coins came here, and already they are useless. In weight they are not value for 1½ of the 10-cash pieces. Again, there is a great shortage of money in the province. Who is going to finance the mint? The original plant is useless, what there is of it. The boilers, etc., are now used for the electric plant."

Unknown Corners of Korea

Big Timber on the Tumen and Yalu Rivers

In an account of explorations in unknown corners of the "Hermit Kingdom," appearing in "The National Geographic Magazine," for July Mr. Roy Chapman Andrews gives an interesting sketch of the country on the watershed of the Tumen and Yalu Rivers. This is a region practically unknown to foreigners and consequently what Mr. Andrews records will prove of interest to all who wish to know as much about Asia as possible.



VIRGIN FOREST IN NORTHERN KOREA

We travelled along the Tumen River, he says, passing through groves of oak, birch, and larch trees into a beautiful park-like valley covered with long, dried grass. It was hard to realize that before us stretched thousands of acres of unknown forests through which a white man had never passed. The dense forest stretched far away to the northwest up the slopes of the Long White Mountain; but shooting was poor and we left in a few days.

The wilderness became thicker as we ascended the plateau and the oak and birch trees disappeared, giving place to larches, from 60 to 100 feet in height, strung with long gray moss. We saw but few birds and no mammals, and even at night when the traps were set the bait remained untouched.

The silence and the subtle influences of the forest began to work upon the imaginations of the Koreans, and after we had

been threading our way for five days through the mazes of an untouched wilderness the natives were discouraged and asked to return. They knew not where they were going or why, except that we were to reach the base of the Paik tu san. When we were high upon the mountain slopes the snow had become so deep that it was difficult to proceed, and we made the last camp in a driving storm of sleet and rain which kept us in the tents for two days.

I had heard before leaving Nonsatong of what the Koreans called the *Samcheyong*, "Three bodies of water." The description sounded much like lakes, which were not supposed to exist in Korea, and it seemed well worthy of investigation. My gun-bearer had been at the *Samcheyong* 18 years previously, when a boy, and I had learned its general location in reference to the Paik-tu-san. It was decided, therefore, to return two or three days' march, strike directly through the forest to the *Samcheyong*, and make our way to the Yalu River, which could be descended to the west coast.

The Koreans were delighted to turn southward, and after reaching an open glade on the bank of a creek we camped for a few days, trying to trap. We caught nothing and saw no birds. A few old deer tracks still showed near the stream, but the animals had not been there for months.

When we broke camp and I told the Koreans that we were to go to the *Samcheyong*, there was an open mutiny, but with considerable difficulty they were persuaded to go on.

I spent two sleepless nights about the camp-fire with the rifle on my arm to prevent the horses being stolen, but the third day we marched into a vast burned track thousands of acres in extent.

A tremendous fire had devastated the forest 10 or 12 years before and left in its wake a cheerless waste of blackened tree skeletons and charred stumps. All day we tramped through this area of desolation, and at night camped on the shores of a beautiful lake 3,700 feet above the level of the sea. We found that there really were three lakes and a long connecting pond between two of them.

They seemed to have been formed by some violent eruption of the Paik-tu-san many years ago, for the basins and shores were of volcanic ash, and my gun-bearer said that if we dug down about 12 feet charcoal would be found. All were circular, the largest about three miles in circumference, and beyond them rose the beautiful white slopes of the Paik-tu-san, the sacred mountain of the Manchus. By building a log raft to enable us to take soundings, we found the largest lake to be about 8 or 10 feet deep, but during the season of rain or melting snow the water would undoubtedly rise greatly. In the centre of the lake was a beautiful little island, heavily wooded, with a long sand-spit projecting toward the shore.

I was greatly disappointed upon returning to Seoul to find that the lakes were known to the Japanese. A military map showed them under the Korean name of *Samcheyong*, and they were probably located either from some ancient Chinese map or from the statements of Koreans. So far as I have been able to learn, none of the foreigners in Seoul or other parts of the country knew of their existence.

We remained at the *Samcheyong* for several days and then started to cross the watershed toward the Yalu River. After leaving the summit of the mountain the forest became denser than that near the Paik-tu-san and the trees larger. Great larches stretching up 150 feet were on every side, their trunks and branches covered inches thick with lichens and moss and their bases buried in tangled undergrowth. The ground was soft and

wet, and soon we were in a series of swamps which made travel well nigh impossible. The only way in which they could be passed was to cut down trees or drag heavy logs, lay them end to end, and drive the horses over.

When an animal slipped off the logs and became mired, it would lie quietly in the water until the packs had been removed, and even then make not the slightest effort to extricate itself. Fortunately the horses were small, and with six men lifting at the legs, head, and tail, and the cook shouting with all his strength we could usually get the brute upon the bridge again. During the whole day we covered only six miles, but the swamps were finished.

Two days more of cutting our way through the wilderness and we came into a thin forest, where a broad trail led down the mountain side. Picking our way among huge boulders, which in many places the horses could barely pass, we descended nearly 2,000 feet to the valley below. There, in a clearing just at the edge of the forest, were four log houses constituting the village of Potisan, the first habitations on the Yalu side of the watershed. We remained over night, and the next day crossed another heavily wooded mountain to the village of Potaidon.

Although Japanese gendarmes often come there, the Koreans had never seen a white man, and I was an object of even greater curiosity than to those on the Tumen River side of the watershed. We camped not far away, in a little grove of trees on the bank of the river, and my tent was surrounded by a curious crowd of natives within a very few minutes after it had been pitched. The next day Koreans were coming from every direction to see our camp and the strange man there.

After collecting at Potaidon for some time, we started across the mountains toward Heizanchin, on the Yalu River, the largest city in north central Korea. A good road led over the hills. . . . The country which we traversed was becoming more and more deforested, and in many places somewhat reminded me of the Egyptian sand-hills near Cairo. There was little vegetation except on a hilltop now and then, where a few trees had been left to shelter a Korean grave. Nearing one of the tributaries of the Yalu River, however, we found the hillsides covered with beautiful flowers. Purple azaleas, buttercups, and violets were everywhere, and, farther on, the banks of a rushing mountain stream were massed with lilies of the valley, which perfumed the air for yards about.

Two weeks after leaving Potaidon we reached the city of Heizanchin. A high, flat-topped hill rises abruptly out of the level river valley and forms a natural fortress, on the summit of which is the ancient town. For hundreds of years this sentinel city of Korea took an important part in the history of the country and was the scene of many fierce struggles between the Koreans and the Chinese, their neighbors across the river.

But its work has long been done; the grim old watch-towers have decayed and the crumbling walls are almost obscured by a luxuriant growth of vines and ivy. Nothing remains of the city itself except the picturesque gateway and an old shrine, standing on the very verge of the hill overlooking the valley below, where the Japanese have built a new and uninteresting town on the banks of the Yalu.

The influence which a great river exerts, almost to its very source, on the country through which it passes was brought forcefully to my attention in Korea. As soon as we neared the Yalu we began to see evidences of lumbering and of the civilization which a great commercial enterprise invariably brings with it, one of the first indications being a party of Koreans carrying ordinary black umbrellas. These people had seen either very few white men or none at all, but were using many foreign articles brought by the Japanese.

Lumber rafts were continually passing Heizanchin on their way down the river; but there were too many rapids in the vicinity to make the journey a safe one for our baggage, and so we continued across country about 50 miles, to the village of Shinkarbarchin. A log raft was secured there, and with our baggage piled aboard we floated some 375 miles, to the mouth of the river on the west coast.

The scenery on the upper Yalu is beautiful, but rather monotonous. Hills and mountains rise abruptly from the river on either side, leaving in many places hardly room enough for a footpath along the water's edge. At times the hills slope away far enough to give a few hundred yards of ground for cultivation, and there Korean and Chinese huts have found a resting place.

The river for the first 100 miles is exceedingly rapid, and a boat can float down it as much as 50 or 60 miles in a day. As it widens the force of its current decreases, the hills become lower, and villages appear at intervals. One of the most picturesque sights was the Chinese junks, loaded with salt or corn, which were being towed up the river by the natives.

The journey is a tedious one, for the boats must be hauled the entire distance against the strong current by man-power, receiving but little assistance from their huge brown sails. It takes seven or eight weeks for the journey from the west coast up the river, and even by making the best possible time a junk cannot do more than one round trip and half of another before the winter ice stops navigation. The Yalu is called by the Koreans the "*Am-nok*" (green duck), from the color of the water in the early spring.

Primeval Forests in Korea

In giving some record of the work done in plant hunting and discovery in Asia by the late Frank N. Meyer (of the United States Department of Agriculture), who was lost in the Yangtze River in the spring of 1918 Mr. David Fairchild reproduces in "*The National Geographic Magazine*," a letter written by Mr. Meyer from Korea giving some facts about primeval forests through which he traversed.

In going to Hoiryong, Korea, Mr. Meyer relates that for many days he traveled through primeval forests, camping at night in log cabins which had been erected for the accommodation of hunters. "These forests are splendid," he writes. "They consist mostly of larches, then follow spruces, then pines and lindens, birches, poplars, and gigantic willows, found in patches or as solitary specimens. The willows attain the same enormous size as the conifers—from 100 to 150 feet tall. I measured larches that had a diameter of four feet, five feet above the ground, and by counting the annual rings of some of the felled giants, I found that most of the trees are between 120 and 180 years old.

"Tremendous forest fires rage at times, and so we traveled sometimes through burned areas. A pitiful sight it is, but in these areas one can see the sun and the sky—a thing which is well nigh impossible in the unburned forest.

"To explore the primeval forest is simply impossible. There is generally only one trail through it, and as soon as one leaves it he is in an entanglement of vines, fallen and dead trees, undergrowth, peat-bogs, mud-holes, and heaven knows what else.

"Traffic is exceedingly light—some days we didn't see a single man or beast, and food is not to be found; neither is water, except at a few places.

"There is an awful gloom in these forests; birds are seldom seen or heard, and the quietude is almost oppressive. Even the drivers of the horses come under the spell of the solitude, and our caravan proceeded in silence except for the noise of breaking branches of trees and the sound of the horses' hoofs touching rocks or tree stumps in the track. In some places a monarch of the forest had fallen across one's trail and then we had to make wide detours to keep clear of it."

Mr. Meyer says that the main crops in the north of Korea are sorghum in some varieties, small millets, wet rice, different varieties of soy-beans, maize and buckwheat. The vegetables are cucumbers, pumpkins, chili-peppers, onions, and a poor, weedy cabbage. Garden beans are also grown, mostly for the dry beans, though. Fruits are absolutely unknown. Here and there one sees a wild pear or a wild plum, but the natives do not cultivate any. A plant of great importance with the Koreans is tobacco. They give it the best place in their fields, as the whole race is addicted to excessive use of the leaf. Some very large-leaved varieties are grown in this country, some of which Mr. Meyer had never seen elsewhere.

Trade Tribulations in Remote Kansu

By RODNEY GILBERT

The province of Kansu is wholly foreign to one's preconceived notions of what China ought to be. It is not a country of rice swamps, or burden-bearing coolies, or of junks and fish smells, or of swarming poverty, but a land of big torrential rivers and magnificent ranges of peaks, a country thinly settled by a rough and vigorous people who are neither very rich nor very poor, who delight in horses and know how to use them, who would rather farm than fight, but who can take up arms in the defense of their interests and fight with a dash and tenacity of purpose unrivaled by any people in China. Both province and people make a strong appeal to the Anglo-Saxon. He likes the people because they do not cringe or whine, and he likes the country because it is magnificent, more magnificent than Switzerland in parts, and because it provides the kind of food, the kind of animals and the kind of wholesome, open-air life that he likes.

The only trouble with Kansu is that it is too far away. If it were within reasonable reach it would long ago have been discovered as a "white man's country," and have been developed by the tireless adventurer merchant who carries the English language and Anglo-Saxon standards into every corner of the world where it pays to buy and sell. Unfortunately it does not pay very well in Kansu as yet. Governmental institutions there are mediaeval and are too far from the centre of things to be subject to much correction. Transport is hard and expensive and the resources of the mountains are undeveloped. It is a journey of 25 days on horseback from the nearest railway head to Lanchowfu, the provincial capital; and from Hsiningfu, where the wool which foreign firms export from Tientsin is produced, is nearly two months' journey by camel caravan from the rail-head.

Illegal taxes are imposed upon commerce, the *likin*, an obnoxious transit tax, is as much a barrier to trade in Kansu as elsewhere, and in the Tibetan border country the Tibetan producers of the articles which go to make up foreign trade are oppressed by military officials who farm out little trading monopolies to their relatives and contrive to make legitimate trade very difficult. These are some of the reasons why Kansu is never heard of. Improved communications would alter matters considerably. Good roads would be an inducement to travel and to trade, not only for the native but for the foreign commercial pioneer as well, and with the growth of trade the lesser difficulties in its way would be duly advertised and eventually done away with.

Bad Roads and Worse Officials

There are three or four important trade routes into Kansu from the coast provinces. There is a big cart road from Kuanyintang, on the Lung-Hai Railway through Tungkuan, Hsianfu, and Pingliangfu to Lanchow, upon which the bulk of the foreign imports which have been popularized in the remote west are carried. Cotton piece-goods, kerosene, cigarettes, soap, and a large variety of cheap Japanese manufactures are carried over this main thoroughfare by cart. Under Chen Shu-fan's régime in Shensi the cost of this transport, when it was possible to travel at all, was almost prohibitive. Depredations by bandits and soldiers advanced the price of grain. Carts were freely commandeered by the military people until the owners of animals and carts fairly fled the country in search of new trails, while on the road between Lanchow and Hsianfu a bandit organization in the walled city of Ch'ienchow looted every cart that passed for more than a year. These conditions do not encourage large trading ventures.

The scarcity of carts was so keenly felt during the first three or four months of this year that merchants whose goods were accumulating at the railway terminus and who saw every

chance cart that dared to venture near a village seized by the soldiery for the convenience of some military traveller, imported from other districts thousands of wheelbarrow coolies who hitched donkeys to their massive barrows and trundled five or six hundred catties over the bad roads from Kuanyintang to Hsianfu for a charge of about \$25.

This same road is the artery for several of Kansu's more important exports. The water tobacco, consigned to Shanghai, and the vegetable medicines, such as rhubarb, consigned to Hankow, as well as many expensive furs come by this route and in normal times, which are becoming rarer and rarer, when the cost of hiring carts or animals is not prohibitive, great quantities of brick tea for Kansu, the Kokonor and Chinese Turkestan are shipped over the cart road to Lanchow which is the centre of distribution.

The most important alternative route into Kansu is the northern camel road with Fengchen, terminus of the Peking-Suiyuan Railway in Shansi, as the rail-head. Imports into Kansu go by way of Kueihuach'eng to Paotouchen, by either cart or camel, thence to Ninghsia, in Kansu, by flatboat on the Yellow River in summer and by camel across the Ordos Desert in winter, and from Ninghsia to Lanchow or Hsining, on the Tibetan border, by either cart or camel. Until recent years camel charges were not excessively high and the Kansu wool trade attracted much attention in Tientsin. Five years ago there were 17 foreign firms represented by agencies in the town of Dangar, a trading post near the Kokonor. Now there are two. Excessive taxation and the exactions of *likin* officials on the road force the camel owners to put up their charges. Taxes on the trade of the buying agents at the Tibetan border have increased the price of wool and an illegal provincial tax on wool which is paid by the exporters increases the cost nearly 20 per cent.

The Wool Trade

Kansu produces and ships to the coast by way of the northern route about 10,000,000 catties of wool a year. The most important districts are Ninghsia and Hsining, which produce about 4,000,000 catties each. Upon this trade the provincial government has imposed a tax of Tls. 2 per hundred catties, which is a clear violation of treaty stipulations, as all the wool is exported under transit passes. The medium for this exaction is a government bureau known as the Public Hide and Wool Bureau which was created under the pretext of fostering the wool trade, of preventing adulteration and the like, none of which services are ever rendered. The offices of this institution are on every trade route in the province, coinciding with the *likin* stations, and at each such station the transporters of the wool are held up by both the *likin* officer and the inspector of wool and hides, and are charged fees for examining the passes, small it is true, but amounting to about a dollar in the aggregate for each camel load which travels from Hsining to Fengchen. There are thirty-six *likin* stations between Hsining and Teng'ou, a Mongol trading post on the Yellow river. These fees are taken from the camel drivers, are added to the cost of transport and, therefore, to the cost of wool. There are still other charges which must be reckoned. The hide and wool bureau is seconded by a weighing office, semi-official in character, to which the purchaser of wool must take his wool to be weighed before paying the tax of Tls. 2 upon it, and for this there is a fee.

The agents of the foreign firms sent out to the remote trading posts are Tientsin men and in their distant posts are persons of some dignity and prestige. They refuse to soil their hands with the sordid duty of buying the wool directly from the Tibetans, Mongols and Mohammedans who bring the wool in, but buy

through brokers known as "*hsieh chia*," who provide quarters for the Tibetans and their beasts, take their wool and skins and sell them grain, cloth, knives and other merchandise in return. The former Manchu Amban to the Kokonor was degraded for trying to impose a wool tax upon the Tibetans in excess of transit charges, but General Ma Ch'i, the present Mohammedan governor of the Kokonor, contrives to get around such difficulties by taxing the brokers, "*hsieh chia*," Tl. 0.80 per hundred catties of wool taken from the Tibetans. This tax is called a "grain and tea duty" and is nominally levied upon the merchandise which the brokers trade for the wool, but it is estimated by the amount of wool received in exchange so, to all intents and purposes, it is a tax of eighty tael cents on wool. In the trading village of Luser, at Kumbum monastery, where about 500,000 catties of wool are purchased annually a relative of General Ma Ch'i who was formerly in charge of the salt office has, through the general's influence, put all other brokers out of business and has made himself sole "*hsieh chia*," so that he fixes both the buying and selling prices and waxes fat upon the returns.

The Iniquitous Tax Gatherer

In addition to these troubles of the wool buyer the camel owner has trials of his own. As before mentioned he is taxed by every *likin* officer and every wool inspector to whom he shows his receipts and passes. Then he pays an annual tax of Tls. 1.80 for each camel, a grass tax of Tl. 0.20 in the Alashan and another of Tl. 0.20 in the Ordos, \$1.50 for the privilege of crossing the Yellow River at Paot'ouchen, a gate tax of a few hundred cash at that city, and an additional fee of Tl. 0.60 which is called the "Official Service Tax." Between Paot'ou and Fengchen there are taxes on carts and camels of which the writer did not take note.

A fair rate for camel transport from Hsining to Fengchen would be something less than Tls. 15. Last year it rose to more than Tls. 20 per hundred catties. Including all taxes wool was bought at an average cost of Tls. 15 per hundred catties, so that roughly it cost about Tls. 35 to deliver one hundred and thirty-three pounds of wool at the rail-head. Out of this there is a heavy loss through cleaning and theft.

In addition to the wool trade, which has ceased to prove attractive to all dealers except those with sufficient capital to work on a narrow margin of profit and to bear occasional heavy losses, there is still some export of camel's hair, of goat and cow hides, of licorice, and to a small degree of hemp. There is scarcely anything which Kansu produces which foreign firms have not tried to export at one time or another. In the long list of experimental exports in the past, out of which wool is nearly the sole survivor, there have been rhubarb, butter, condensed cream, yak hair, bones, yak tails, hides, goat hair, goat's beards, horn of all kinds, furs, musk, gold, Tibetan woollen cloth, and even the tall grass, which grows in the Kokonor.

What the mineral resources of this remote province are no one definitely knows. The copper mines which were opened at Yaokai, northwest of Lanchowfu many years ago, failed to pay because of the hordes of official "deputies" who were deputed to make their fortunes and their friends' fortunes out of the venture.

Coal of good quality, both hard and soft, is found in nearly every part of the province, and costs at the mine about 6 cash a catty (2,000 cash to the tael). Gold is found all along the Kokonor border in small quantities and is usually washed by Mohammedans.

Salt is produced in quantity in the Kokonor and at lakes on the Mongol border, one of the biggest stations being at Pai Tun-tze just north of the great wall in the Alashan desert.

Lead has been found in the Kokonor, but the diggings are concealed by the Tibetans and Mongols who fear the rapacity of the Moslem military commanders.

There is still timber on the Minshan, in the southwest of the province, which is cut by the Tibetans and is rafted down the Tao River as far as Titaohsien, where it is held up by the local officials, who, together with the lumber merchants' guild, are interested in keeping up the price of timber, and is hauled overland to Lanchow instead of being rafted down the Yellow River.

Kansu's waterways are torrential and are not easily navigable. Skin rafts carry some products down the Tao River, the Hsining River and the Yellow River as far as Chungwei. From Chungwei to Paot'ou flatboats are the medium of transport in summer. Two gasoline flat-bottomed launches have recently been launched on this section of the river by Governor Chang Kuang-chien and there is much discussion of building a motor road from Lanchow to Ninghsia to connect up with this boat service which will in turn connect with a motor service from Fengchen and will bring Lanchow within eight days of Peking.

Developments of this sort are so essential to the future growth of the remote western provinces that in comparison nothing else really matters. The real necessity is, of course, for a railway and it is a sign of progress that all classes in Kansu are now clamoring for a line which would follow the general course of the camel route and which would develop not only through trade with Kansu but a huge tract of waste land around the northern bend of the Yellow River which possesses all the qualifications for becoming a great wheat country.

In the course of a letter on the "coal mines going down and into the hillsides for miles and miles" near Lanchowfu, the capital of Kansu Province, the correspondent of the "North-China Daily News" says that in the range of mountains to the south of Lanchowfu, rising ten thousand feet above the level of the city and fourteen thousand above the level of the sea, "the Lanchow people have dug and dug into these hills, and a very lucrative thing they have made of it too. I had the privilege of going down one of the mines lately. It is interesting—for once—but never again! For dirt, heat, foul air, commend me to a Lanchow coal mine. Two shafts are sunk, one for air, and there are numerous cross passages. The shaft is propped by a framework, hexagonal in shape, so that as you descend the shelving slope of the mine you are on a series of steps formed by the lowest side of each hexagon. The supports thus form a staircase, and up and down this stair all day and all night men walk, with baskets for coal on their backs. Some are blind, but they can carry coal to the pithead as well for all that. They are paid by the basket, and surely a more degraded kind of existence is scarcely imaginable. They come from all provinces—the very-scouring of the people some of them. To descend the shaft to the far end of the last gallery, and see scores of these naked men, crouched in a line each waiting his turn for coal is a never to be forgotten sight. They are nude, for dress is unnecessary and cumbersome. The air is vile. The dim light of their oil wicks (which some of them do not use) only lends a touch of unreality to the weird scene.

"At night the mines on the hillsides are a wonderful sight. The pitheads are ablaze with light, and carts are filled up and driven away with the coal destined for the city. There is good coal in some parts of Kansu, specially perhaps at Chen-fan, Chengquei and Ninghsia. Lanchow coal is not very good. Two chief kinds are used—lump coal and dust coal. There are separate mines for each kind. Chengquei is very rich in minerals—coal, copper and other ores. But still the railway carries!"

A fire recently destroyed the busiest and wealthiest portion of the city of Jaochow, rendering some 2,000 people homeless. Jaochow, like Kiukiang, Kian and other large commercial cities in Kiangsi, has its principal business rendezvous outside the city. There is a very busy river front packed with shipping from every part of the province. The large trade down three important rivers passes by Jaochow. The shipping along the river front extends for 10 $\frac{1}{2}$. Tea, tobacco, indigo and porcelain are the main exports from this busy centre.

There is a proverb well known in Kiangsi Province, China, to the effect that "if medicine does not pass through Changshu it is not efficacious." Changshu is perhaps the greatest medicine centre in China, writes the correspondent of the "North-China Daily News." It comes after Chintehchen as the largest "chen" in the province. The place is exceedingly wealthy, being well stored with rare and valuable medicines. There is quite a benevolent custom in connexion with Changshu. People from this district if overtaken by misfortune have only to apply to the nearest medicine shop and the needed succour will be given. Like the Hueichow merchants the Changshu doctors are in every part of China.

Chihli Province River Improvement

The Commission for the Improvement of the River System of Chihli Province, the metropolitan province of China, has issued its second report. The work of this body bears directly upon the preservation of Tientsin from floods similar to that which took place in 1917, when some 40,000 square miles of territory were effected, and some 5,000,000 people rendered homeless. While the Hai-ho Conservancy Board had in hand the improvement of the Hai River, on which Tientsin is situated, and which acts as the channel to the sea for a tremendous amount of drainage from the hinterland, the floods of 1917 brought the fact sharply home to all concerned that the situation would have to receive much wider treatment than the Conservancy Board could give it, and a joint commission was suggested which eventually developed into the "Commission for the Improvement of the River System of Chihli." Mr. Hsiung Hsi-ling was appointed President of the Commission, and has justified his appointment by the broad-minded energy he has displayed in carrying out the objects for which the Commission was formed. The original purpose of the Commission was to collect data necessary for the framing of a grand scheme for the improvement of the Chihli river system, but Mr. Hsiung, in order to make the work of the Commission effective and immediate converted it into a body having administrative functions. Thus it was arranged that the expenditure of money released by diplomatic consent was to be effected by the Commission as a whole, and it was made possible for it to administer engineering works if circumstances rendered that procedure advisable and otherwise possible. As a result of this declared policy the Group Banks released Tls. 1,200,000 from the balance set apart for the reorganization of the Salt Administration for the surveys needed in connection with the grand scheme; and for certain specified work calculated to improve the Hai-ho, better its navigability, and lessen the danger of floods. In February, 1919, the Commission received an addition to its funds of \$2,000,000 to continue the work.

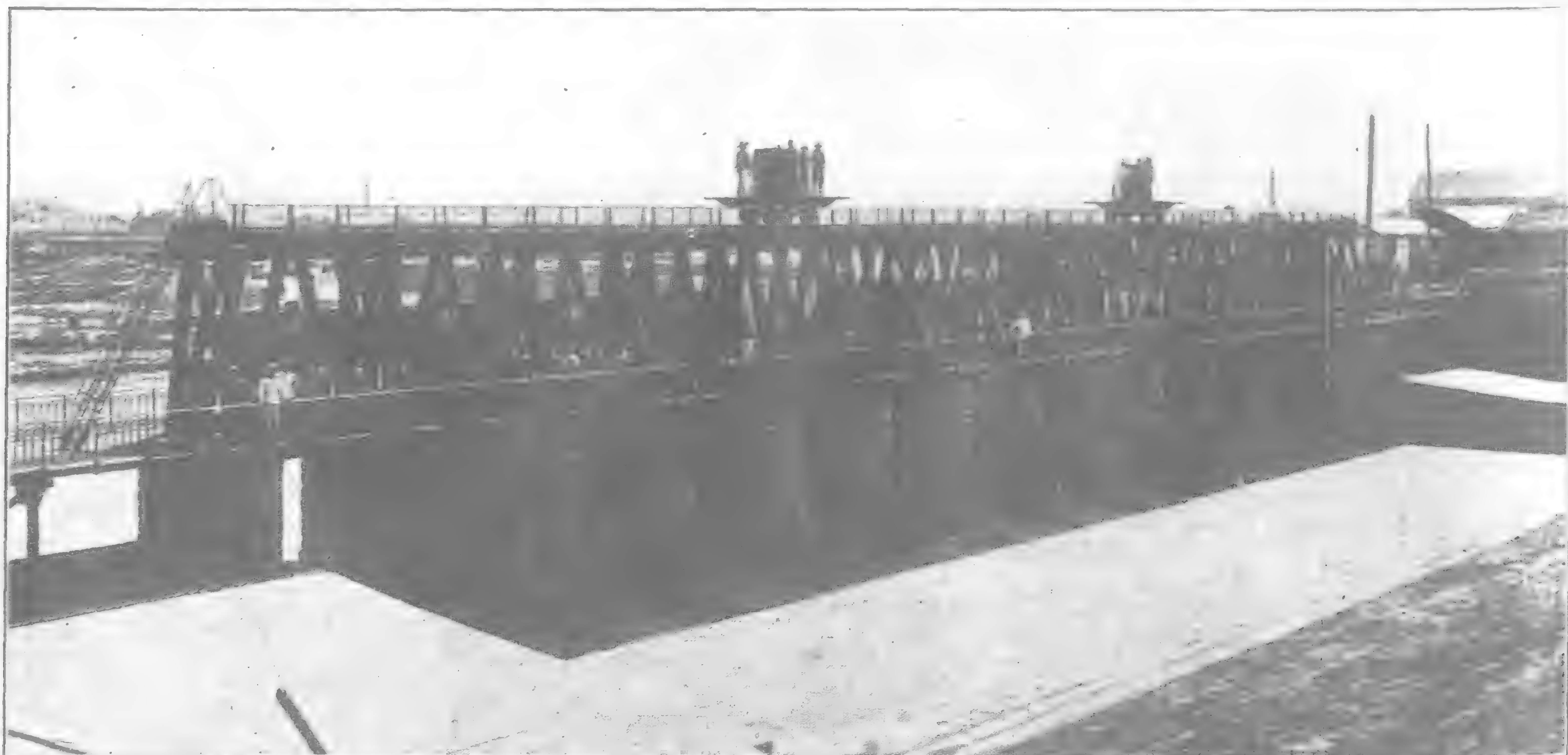
Always the Commission had to keep before it the probability of phenomenal floods filling the Hai-ho with silt and causing the city of Tientsin to become submerged, and its energies must continue to be directed by this consideration in the carrying out of engineering works. So far the work concluded embraces progress in collecting data in connection with the grand scheme; the making of cuttings and the building of dykes to relieve the conditions obtaining on the Hai-ho; and the completion of a modern sluice in place of the old weir on the Hsinkai-ho, thus providing for the release of accumulated waters in times of flood. A modern sluice has also been provided for the Machang Canal to regulate flood

waters in that course. All of the original programme set down by the Commission for immediate attention could not be carried out, popular obstruction to the cutting of a defluent two kilometres wide from the Pei-ho to the sea to deal with surplus water temporarily holding up that important phase, the obstruction being ostensibly due to objection on the part of the native farmers to give up their lands, but in reality, it is said, to the superstition that artificial alterations to rivers induce calamities.

The work of the Commission is, of course, in its infancy, and if sagacity is shown in overcoming initial difficulties and performing the task at present allotted there is no reason why the Commission should not develop into one of the most important Government departments. If its duties are expanded they will cover the whole of China for they will have to do with the causes of most of China's calamities. The most thickly populated districts and the most fertile are the broad, low plains over which the great rivers amble about at their own caprice, now fertilizing, now deluging and devastating. Almost every year in some part of China or other, thousands of lives and the results of untold labor and great investments are wiped out by the freakish behavior of some big stream which breaks its bounds, changes its course, or sweeps away the dykes that fence it. To overcome these depredations of streams will be the work of the Commission, and because the work is so badly needed it is to be hoped that ways and means will be found to permit the Commission not only to expand but to become a permanent institution.

The concluding remarks of the report, which indicate that this is expected, are as follows: "Ordinarily a Commission brought into existence will have some definite organization marked out for it or will have some precedent to follow. This Commission has had neither of these advantages. It has had to organize itself from within on a combination of Chinese and foreign methods; and it has had to gain its own experience in so doing. On the whole it can be considered to have surmounted its initial difficulties in a satisfactory manner. The organization of its large staff and of the administrative machine for the conduct of affairs is, in general, completed, though evolution in this respect can be expected to proceed. In this matter of organization the Commission has considered it proper to assume that it is a permanent institution.

"While, from circumstances beyond its control, it has not yet succeeded in commencing actual work on the reversion of the Pei Ho, it has progressed satisfactorily in its main duty of gathering data for the grand scheme and, in addition, has effected the Cathedral Cutting, has materially improved the Hsin Kai Ho and has provided at all events temporarily for the safety of Tientsin against a flood from the south."



GENERAL VIEW OF THE MODERN SLUICE BUILT ON THE HSINKAI-HO, TIENTSIN, AS PART OF THE WORK BEING CARRIED OUT TO PREVENT A REPETITION OF THE DISASTROUS FLOODS WHICH OCCURRED IN 1917

Of Globe Trotters

BY GERALD KING

The Chinese Customs Returns, in dealing with imports, are chiefly interested in those that pay duty. Globe trotters pay no duty, and so do not appear, although they are an important import to China.

The globe trotter eventually returns home and retails his impressions to his relations and friends. Stay-at-homes are more guided by the words of a man they know than by anything they read in periodicals and so the reputation of one country in another country depends largely on the opinion of returning visitors.

All other countries lay themselves out to show their best side to globe trotters and to do all they can for them. China does nothing. It is not only by skilfully organised publicity that Japan keeps such a lead on China in American public estimation, and is always quoted as the good boy of the Far Eastern family. The visitor to Japan finds the public buildings well swept and garnished, the national art treasures religiously cared for, and all the filth and garbage of Asiatic life carefully relegated to the background. Everyone is polite to the globe trotter: all realise his importance and do their utmost, in a praiseworthy spirit of patriotism, to give him the best impression they can of their country.

In China the reverse is the case. The public buildings are all decayed and neglected, or in the occupation of some dirty-looking soldiers who perpetually lounge about the gates. The art treasures are, with one exception, practically invisible, and there are lamentable stories of the disposal of the contents of the Palaces at Mukden and Jehol. Sights and smells assail one in every street that eloquently mark the difference between Chinese and American ideas of sanitation.

An effort is needed to remove all this. The improvement in the cleanliness of the streets of the Capital in the last ten years shows how much more might be done in that way. The small museum within the Forbidden City is a praiseworthy beginning which should be extended and amplified. Vandalism such as the erection of some ugly little brick buildings in the grounds of the Temple of Heaven should be sternly suppressed. The Chinese are a polite and ceremonious people, though the language bar prevents them ever being able to do much to help foreigners, but the rising generation who are nearly all studying English should be taught that their fathers' manners are an inheritance that they should not despise.

Apart from the value of the globe trotter as a factor in the formation of public opinion, he has a great value as a spender of money. From the moment he arrives in China until the moment he leaves there is a steady trickle of silver proceeding from him, which with some broadens into a noble stream. Hotels are built for his accommodation, railway budgets are increased by him, and the priests of many temples would pray for him at every service were they properly grateful.

To the foreign resident abroad the globe trotter is not so welcome. His presence undoubtedly puts up prices all round, and if he is furnished with letters of introduction it means a round of visits to the famous places of the locality, when he is almost sure to offend either by being wearisome in his appreciations or else, more unforgivable sin, failing to appreciate his host's favorite view and bringing up disparaging comparisons. And there is a cheerful, blatant, cocksure ignorance about some of them which is trying to the beholder. Often where the resident hesitates and qualifies an opinion, they *know*. They have it from the guide book. And they soon establish a wearying private language based on references to incidents which happened at other places. "This reminds me of Wollah-wollah." "I shall never forget one evening at Blastanddam", and so on.

Globe trotters import themselves. This is a wise precaution on their part. The supply is regular and increasing, and they

mainly come on from Japan. This is desirable, as Japan combs the bulk of the superlatives out of them, and leaves them with a less devastating stock of enthusiastic misapprehensions.

Peking is their main hunting ground in China. Some go elsewhere, but usually only on their way to Shanghai and their steamers. It is in Peking that the bulk of their money and exclamations are dispensed. They may be roughly classified into two orders, Americans and British, and each of these may be subdivided. The most noticeable type is the enthusiastic family. This consists of father, a cheque signing animal, mother, a plump lady in quest of her youth, a sister-in-law of neutral tint, and about three children. These latter have brown legs and seem to have solved the problem of perpetual mastication. They have been enumerated in inverse order of importance, and we have said nothing of the eldest child, an adolescent of 16 or 17. Upon her falls the burden of approximating a cinema heroine.

They may be met at all hours of the day, in rickshaws, in curio shops, in fairs and temples. Father is uniformly subdued. His part, once the money has been handed over, is to play the rôle of policeman when the younger members of the family become definitely too obstreperous. Mother is mildly interested, but the cares of a family have installed a calculating machine visibly in her eye. The sister-in-law is the first line of defence against the children. They are enthusiastic. Each succeeding sight strikes them as bully or sweet, according to sex. They find the Temple of Heaven, Lama priests, the Great Wall, and beggars, alike sweet. Some are promoted to cute. And they promenade Peking, blandly spurning the historic dust of the centuries, in a state of barbaric enjoyment.

The second type is the wealthy globe trotter and his wife. We suspect that they are less of a boon to the hotelkeeper than the enthusiastic family. They are accustomed to good hotels, and resent Far Eastern ones. They are out to pay well but not ridiculously for things of which they know the value. It is quite possible to swindle them with curios, but it is not easy to get them to pay more than the right price for Western articles. The European shopkeepers, those brigands of the Far East, have not much success with them.

The last great type is the Glorified Commercial Traveller, representing Big Interests. They are abundant, and have all a kind of cousinship. They are all vague and secretive: they are all near to the Biggest Thing in Asia: and they never quite get there. At present the type is particularly well represented in Siberia. They travel greatly, have many interesting experiences, and must, by the time they come to the ends of their careers, have had pleasant lives.

The British tourists are of two kinds: those who are on their honeymoons and those who are not. Those who are are so interested in themselves that they cannot be of any interest to anyone else. They see temples and sights dimly as in a dream, and the most remembered days of their tours are not when they saw for the first time the autumn sun on the roofs of the Palace, but the dreadful, dreadful day when they had that terrible running quarrel, extending over 27 miles of sight-seeing, at the end of which she said she would return to her mother and he ate his dinner in a savage manner.

Those who are not on their honeymoons are usually past forty and given to comparing the different hotels they have stayed in. Past meals stray into their conversation, as well as brief summaries of grievances against polyglot hotel proprietors in distant parts of the earth. Their ladies produce knitting in the evening, and whisper when the more gorgeously appalled fair ones pass them.

Residents in the Far East are more interested in the way that globe trotters behave. Here we have good grounds of complaint. There is hardly a public monument within fifty miles

of Peking which is not defaced by inscriptions and dates, and a few persons of little education have added obscene remarks. This habit is as silly as it is ugly. It was objectionable when only foreigners went sight-seeing, but now that the Chinese go in greater numbers than foreigners it is doubly so, as they have adopted the practice and for every inscription by Messrs. Smith, Brown, and Robinson there are ten by Messrs. Li, Wang, and Chang. If it is within their power they make their record bi-lingual, as

"6th August, 1919

Mr. Yuan Chien-hsun

Mr. Jam Tien-sin

Mr. Ching Chang-ming

Mr. Li Liu-che

all came to here in a fine weather."

A more serious evil, the effects of which can be seen at the Summer Palace, is the habit of stealing souvenirs. All the ridge-end decorations, consisting of little glazed earthenware dogs, lions, and horsemen, which could be reached from the galleries on either side have been stolen by tourists. This is only possible in a country where the guardians of the exhibition places are feeble old men endowed with no authority, ill paid, and in a deadly fear of foreigners. The effect is lamentable.

Senseless destruction appears to be one of the results of beauty on the ignorant. In many places can be seen the traces of wanton damage which can have given no one any profit. No souvenir hunter collects chips of marble. The Yellow Temple shows the most distressing traces of the vandal in the irreparable damage done to the beautiful marble stupa erected by the Emperor Ch'ien Lung in memory of the Dalai Lama who died in Peking in 1784. The lower portion of the monument was carved in relief with scenes representing the death of the Dalai Lama, and nearly all the faces were knocked off by the troops of "a certain nation" in order to show, presumably, that the Boxers were not the only barbarians. In many other places unfortunately similar acts have been committed. Why, it is difficult to guess. Just as children delight in breaking things, so apparently do a certain class of men.

Advice to Globe Trotters

1.—Write your name and the date of your visit on all monuments. This will interest other visitors, who will be surprised and pleased to learn that you can write.

2.—Do not be afraid of pushing into any rooms or buildings to which the public are not admitted. Remember that the owners are, after all, "natives" and it is your duty to the higher civilization you represent to impress them with the fact.

3.—Do not fail to commit any acts of petty theft which would in your own country land you in the penitentiary. Your privileged status as a Treaty protected foreigner will enable you to bluff through, and you can give an extra twenty cents to the Chinese caretaker, who dare not say what he thinks. Remember Treaties confer privileges, not responsibilities.

4.—Do not be influenced in your actions by any consideration for other people. If after your visit some of the decorations are missed, by subsequent visitors, that is their fault for not having come before.

5.—Do not trouble to remove the traces of your meals. Leave the paper in which your sandwiches were wrapped where it lies.

A tourist says to me:—"You are unfair and unjust. Globe trotters are not the race you make them out. To begin with, I have been equally irritated with you at the number of fools who have written their names on walls and monuments. But I noticed that the majority of the names were those of men who were certainly not globe trotters, and might be classed among your privileged race of superior beings, the residents in Peking. Most of the names belong to members of the various Legation Guards. As to ignorance of the country, and silly remarks which may try the hearer, it is not possible for a man who wishes to see something of the world to devote the previous twenty years to the study of the countries in which he is going to travel. And as to the other members of the party, they are more interested in beauty either natural or architectural which makes a simple appeal to them, without needing the assistance of technical knowledge. I admit that comparisons are odious, but sometimes human nature is weak. Now you have said what you think of globe trotters

from the Chinese point of view, and I should like to say what I think of the way the Chinese keep their country from the globe trotters' point of view. I pick up a paper, and in any part of it I am sure to find articles written for or by the Chinese decanting on the way they are treated, and asking for the remission of the binding clauses in Treaties of which they complain. But so soon as I left the first Treaty port in which I landed I found that I had left any sort of modern civilization behind. There would be nothing but land to let in treaty ports if China were anywhere near what her publicists make out. You do admit that the majority of the public monuments are decayed and neglected, but you do not say to what extent the damage has gone. The Ming tombs, one of the most wonderful sights in the world, are going to disappear altogether unless something is done. The Temple of Agriculture is being made into a beer garden, with billiard tables in the pavilions. There is a soda factory at the jade fountain. And everywhere there is nothing but graft and greed as far as the tourist can see. The priests are allowed to charge admission at the Lama temple, but no one sees that the money is spent in any repairs to the buildings. Part of one of the buildings has already fallen in, and if one climbs up to the level of the Big Buddha's head one can see that only the solidity with which the original builders built has kept the place going as long as it has. You try to make out that what is wanted is sympathy and a better understanding. So far as I can see what is wanted as far as the show places of China are concerned, is someone with a shot gun to attend to the keepers of them."

After six years of intense activity as American Minister at Peking Mr. Paul S. Reinsch retired and left for America on September 13 last. His departure was the occasion of many demonstrations of friendship and regard on the part of the Chinese, both officials and civilians. Various Chinese organizations entertained the departing Minister and speakers gave unstinted testimony of the appreciation felt by the Chinese for the efforts Mr. Reinsch had from time to time put forth to assist them and their causes. The warmest eulogies were also spoken by American citizens, who regard Mr. Reinsch as perhaps the most active Minister they have had in China. He always had time for the consideration of any question calculated to advance American interests, and was approachable to anyone connected with such interests at almost any hour of the day or night. Among other nationals Mr. Reinsch was held in high regard for his scholarly attainments, and at the railway station on the evening of his departure there was a large international gathering to bid him bon voyage and to testify to the popularity in which he was held. Although the retiring Minister leaves China he does not sever himself from her interests, and he is to be congratulated upon having secured his services as an adviser, resident in America, on affairs of finance and international politics. In this capacity he should be able to render good service to both Chinese and American interests.



FROM THE SUBLIME TO THE RIDICULOUS

A former locomotive which graced the Manhattan Elevated Railway in its day, has, for some time, been doing the humble work of a switching engine on the short railway between Canton and Samshui, South China. The photo is by courtesy of the U.S. Bureau of Foreign and Domestic Commerce.

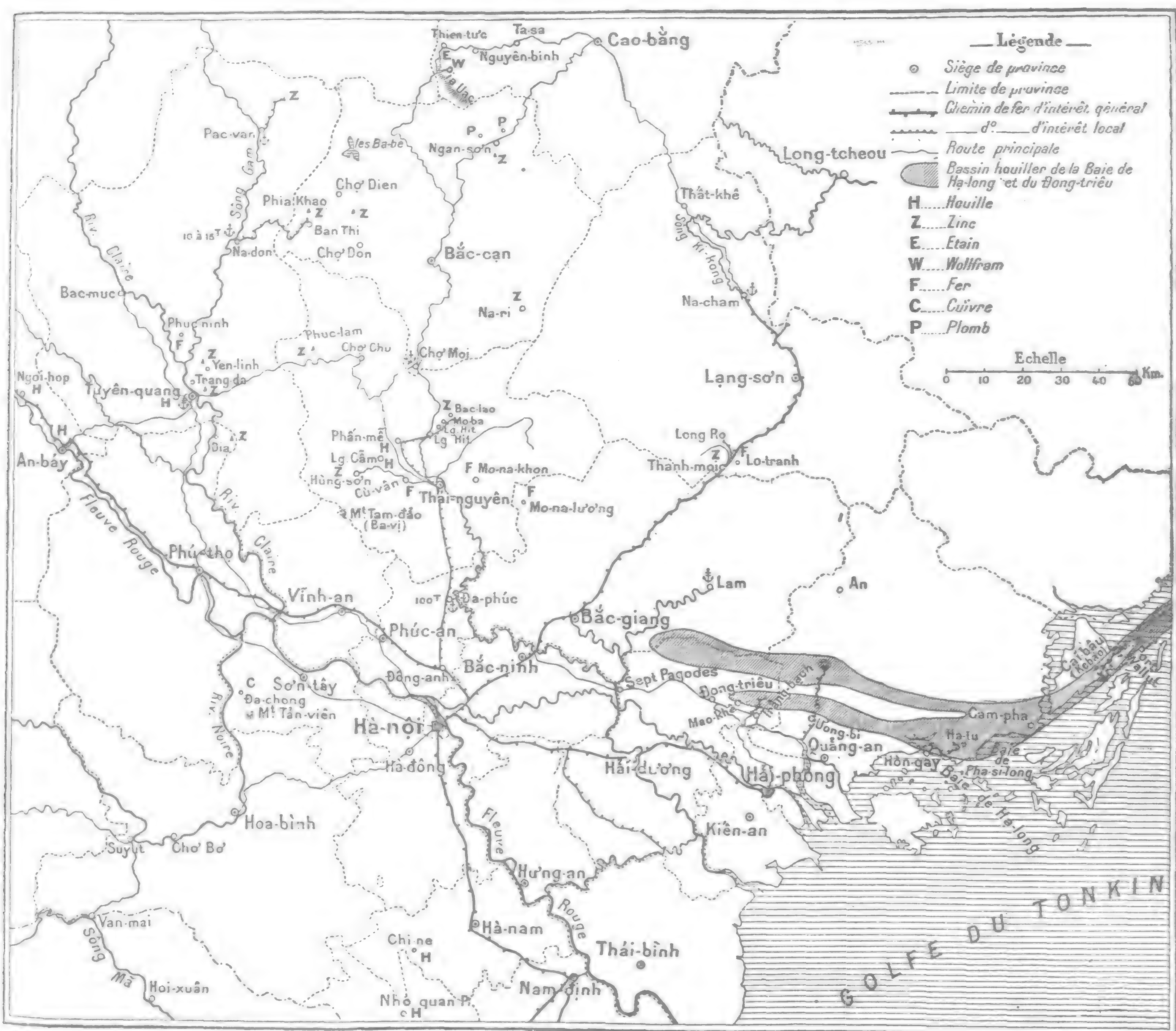
The Mining Industry of Indo-China

Principal Workings of Metallic Mines

The graph which we gave in the first instalment of this article shows the remarkable development of the mines of metallic ores of Tonkin since 1906. Before this time not only were not metallic mines being worked, but apart from certain mines such as those of Thien-Tu'c Ngan-So'n, etc., the exact position of the layers formerly worked by the natives were not known and consequently neither were their value. It is true also to say that up to this time circumstances had rendered it particularly difficult to do any mining exploration beyond the delta. But from this time sensational discoveries succeeded each other. We quote in the order of their respective productions the mines of Trang-Da, 1905, those of Lang-hit, 1906, of Thanh-Moi, 1907, of Cho-Dien, 1908, and Yen-Linh, 1909.

The table given on page 647, giving the production of the zinc mines of Tonkin in 1916, and relating to the graph which has been

given earlier of the metallic production, shows that there has been a total production of 51,000 tons of mineral ores of which the zinc mines have supplied 49,000 tons. It is then these mines whose remarkable development have made Tonkin in the space of ten years a country of metallic mines. Before the war the Tonkin zinc mines sent the whole of their production to Europe. Generally the richest ores were treated in Belgium, the others in Germany. In the first few months of the war it was possible to send a few shipments to France and England but at the end of the second six months of 1915 freights had risen to such proportions that to send further shipments to Europe had become impossible. The increase of cost in this respect happily coincided with the arrival in the Tonkinese market of Japanese buyers who took over the Tonkinese production advantageous enough for the exploiters of the mines, but even more so for Japanese industry.



THE MINES OF TONKIN

This leads one to think that the price of freight to Europe will remain high for a long time after the war and from this it is possible that Japan who is favored by actualities and has become a great producer of zinc, though possessing only a little of the ores of this metal will remain our principal customer. At this very moment the question of the establishment at Tonkin of means of dealing with the ores is being considered. The idea is very interesting and deserves to be deeply considered. At first sight the treatment by electrolysis or by electric furnaces is particularly interesting.

The Trang-Da Mines

The Trang-Da mine is situated on the left bank of the River Claire in the hill of Fort Giovaninelli, which more than 200 metres high, dominates the town of Tuyen-Quang, situated opposite it on the opposite bank of the river. Its situation is exceptionally favorable, the workings being only a few hundreds of metres from the wharf where vessels of 60 to 100 tons are able to go to be loaded.

This mine, formerly worked by the Chinese who appear to have found galena abundant in certain points of the formation, was discovered in 1905 and work was commenced upon it in 1906 by the Societe Civile de la Mine de Trang-Da. Since then it has supplied about 90,000 tons of calamine. Subterranean and open air workings are adopted simultaneously. They are composed of eight stages, vertically distant about 20 metres which have been worked in proportion to the state of their preparation. Until 1916 only calamine was taken out, but since that time the mine has been worked for lead ores (pure galena or mixed with iron pyrites and a little blende and occasionally oxidized ores). The ores from the two workings on the north and south flanks of the hill are treated in washing establishments at the foot of northern workings.

For the calamine a summary classification is followed at the cuttings which send down in separate wagons the large pieces and everything coming through the screens. The large lumps are reduced to blocks about the size of one's head in order to be conveniently calcined in the furnaces. The other is put out on grills, the earth is washed out and the residue is divided by hand into useless material, that fit for grinding and that ready for the furnaces.

The washing installation receives all the small material from the picking, calamine mixtures for grinding and all the lead ores. According to the state of the various stocks lead and zinc ores are treated alternately. The latter becoming more abundant have led to the creation of a special washing section which is in course of construction. The washing apparatus treats sixty to seventy tons of ore per day of ten hours and produces 24 to 30 tons of crude ore equivalent to about 18 tons of salable calcined ore. The treatment of lead ores gives from 8 to 10 tons a day according to the richness of the ore.

Treatment of Calamines.—The ores are calcined in tub furnaces, five for the large lumps and three for the small. Each furnace is capable of burning about 12 tons a day, while the furnaces for the small produce six tons each. The ores are then placed in sacks and sent by boats, junks, to Haiphong.

The motive power is supplied by three motors of the Duplex type each giving about 50 H.P. These drive three dynamos giving a continuous current of 500 and 250 volts, supplying current to various services—washing, lifts, light and the workshops.

For the purpose of sale the products are classed as follows:—

- 1st quality containing 55 per cent. and over.
- 2nd " " 45 to 55 per cent.
- 3rd " " 40 to 45 per cent.

There is also a ferruginous quality containing 34 to 40 per cent. prepared especially for the preparation of zinc oxide. The lead ores are classed as—Galena giving 58 to 60 per cent of lead and from 250 to 300 grammes of silver, and ceruse yielding from 60 to 70 per cent. of lead.

Production.—The production ranges about 1,000 tons per mensem and in 1917 was in a fair way of being augmented.

Personnel.—The mine engages normally 17 Europeans and 1,500 coolies, Annamites, who are lodged at Trang-Da and receive the attention of the outside medical service of the province of

Tuyen-Quang. Sanitary conditions were bad at the commencement, but are now improving thanks to the comfortable arrangements made by the Societe for its personnel and the health works which it has undertaken.

The Mines of Lang-Hit

The mines in the region of Lang-Hit, situated 17 kilometres to the north of Thai-Nguyen on the left bank of the Song-Cau, were formerly the site of important native workings. Rediscovered in 1905 they were immediately exploited again. Three deposits are actually worked by the Societe Miniere du Tonkin (a limited company with a capital of Fr. 2,000,000 in shares and Fr. 3,000,000 in bonds.) These are, going from south to north, the seams of Lang-Hit, of Mo-Ba and Bac-Iao. These are connected one to the other and to the Lang-Hit river, the point of shipments for their products, by a number of tracks (Decauville), of inclined planes, aerial cables, etc., developed for about 10 kilometres. The ores prepared at Lang-Hit river are sent from this point to Haiphong in sampans along the Song-Cau. The construction has been recently undertaken of a railway of one metre gauge, connecting the mines of Lang-Hit to those of Phan-Me (13 Kilom.) and there is also under consideration the construction of a railway from Phan-Me—Thai-Nguyen to Dong-Anh which will permit of the transport of the products by rail to Phu Da-Phuc where they can be shipped in boats of about 100 tons.

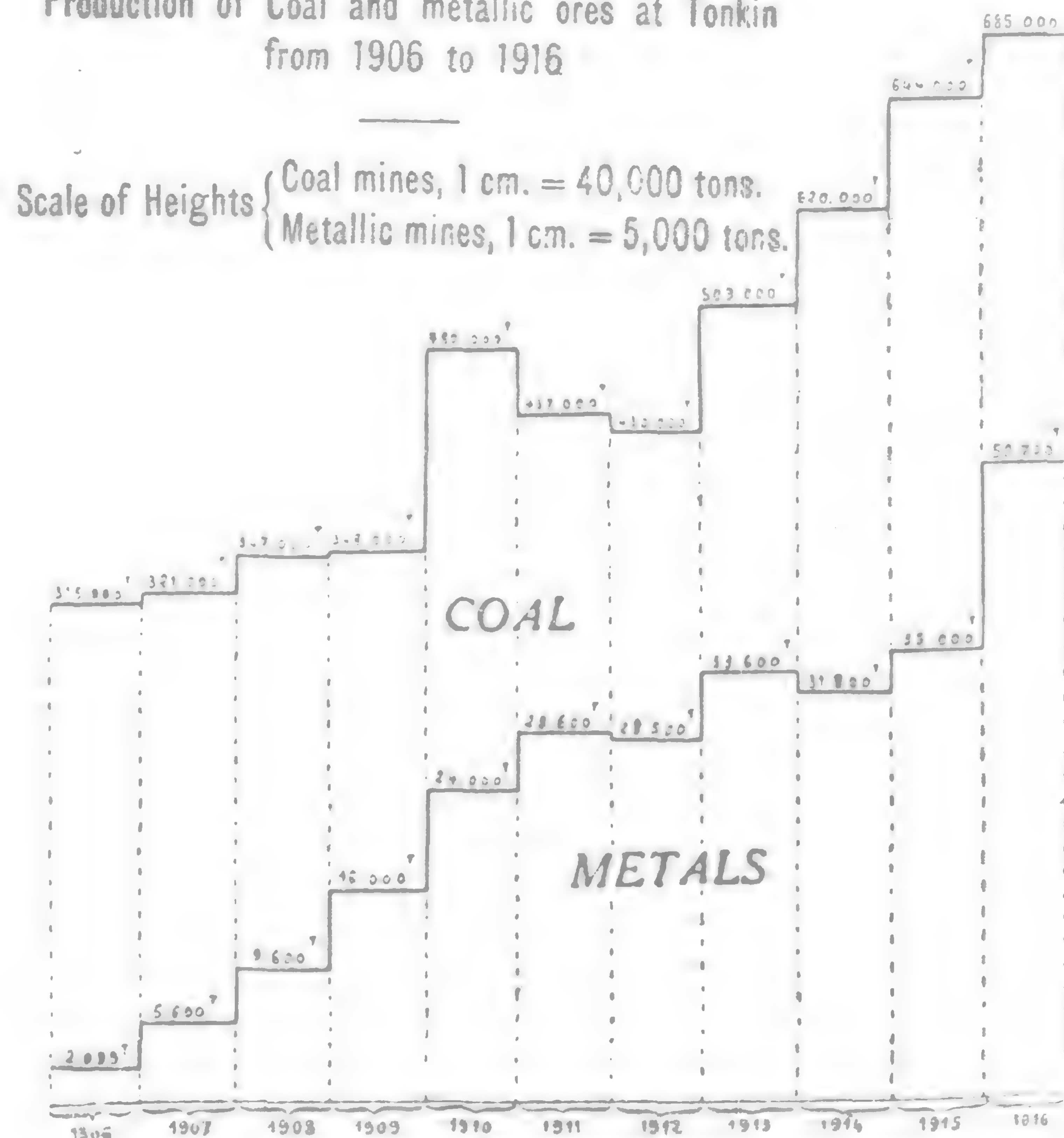
Deposits.—The region under consideration is constituted—as at Trang-Da—of a mass of lime stones and primary schists.

The Lang-Hit Mines.—At the Lang-Hit mines the mineralization—Calamine, and Blende with accessory galena—is found in fractures parallel to each other and in strata sometimes interstratified amongst the former and sometimes cutting across them. In some instances secondary fractures cross the general lay of the deposit and produce especially rich ground at the points of intersection. A central electric station of 250 H.P. supplies power to the windlasses for extraction of the ores, to the pumps for drainage, etc.

The region of Lang-Hit has produced since the commencement of its exploitation about 39,000 tons of ores of which 26,000 tons are of calamine and 13,000 of blende.

Mo-Ba.—This region was opened for working in 1911 and gives in the limestones in the neighborhood of their contact with the schists a general mineralization of Blende, calamine and a

Production of Coal and metallic ores at Tonkin
from 1906 to 1916



Graph showing results of mine working

mixture of the two in the clean fractures of which the workable thickness varies from .30 metres to 1.50 metres and which stretch out in three principal directions.

The production from Mo-Ba has been 22,000 tons, half blende and half calamine, since 1911.

Bac-Lao.—The Bac-Lao Group have a rich mineralization of calamine and blende in a very dense network of veins. In the neighborhood of the veins there are twin nipples covered with a silicious or carbonated earth containing a small quantity of zinc (from 10 per cent. to 20 per cent.) and with a view to treating this a factory for making zinc oxide has been constructed at Lang-Hit Fleuve.

A small thermo-electric power station of 50 H.P. supplies the necessary power for pumps, windlasses and mechanical drilling.

Bac-lao has produced since the commencement of its exploitation, in 1909, 27,000 tons of calamine and 10,000 tons of blende.

Lang-Hit Fleuve.—The ores from the three workings, with the exception of the mixtures of blende and galena and the earths of small mineral content, are, after sorting, washed on the spot and sent to Lang-Hit Fleuve, where they are burned in fire tub furnaces each turning out from 12 to 15 tons of calcined products each per day.

At Lang Hit Fleuve is also situated a factory for making oxide of zinc, producing two tons of oxide containing 70 per cent. of zinc a day, the repairing shops, supplied with power from a thermo-electric plant of 50 H.P., godowns for supplies and the ores, offices and the infirmary.

Personnel.—The Societe Miniere du Tonkin employs in its mines at Lang-Hit 15 Europeans, including the manager and a French doctor, and about 1,200 Annamites. These latter are cared for at the infirmary at Lang-Hit Fleuve, which contains 18 beds. Six native nurses assist the doctor and sanitary conditions are constantly being improved.

Production.—The production of the Lang-Hit mines has amounted to 98,000 tons of ore from 1907 to 1916, of which two-thirds are calamine and the remainder blende.

The Mines of Cho-Dien

The mining region of Cho-Dien is situated 18 kilometres to the southwest of the Babe lakes and 20 kilometres east of Na-Don, and is located on the Song-Gam, 12 kilometres up stream from Chiem-Hoa. The Song-Gam is navigable from Na-Don downstream by sampans of from 10 to 15 tons. At Tuyen-Quang these latter are discharged into boats of from 50 to 100 tons.

The evacuation of products is from Na-Don, but to connect this point with the mining region it has been found necessary to construct a railway of development 35 kilometres long, which at certain points in its length crosses particularly difficult regions. The construction of a work of this importance to serve a calamine mine is, perhaps, unique throughout the world and is only justified by the immense richness of the mines of Cho-Dien.

The deposits.—Actual workings are developing for a distance of about two kilometres in a region situated about 2,000 metres to the northwest of Ban-Thi, the terminal point of the railway where there are installed the furnaces, workshops and the offices of the management.

The workings are going from southwest to northeast, those of La Pointe, of Nam-Van, Phia-Khao and Pao-Pen. The first two are situated about hill 600 on the southern slope of the plateau of which Phia-Khao and Bo-pen occupy the greater part. The workings are connected together and with Ban-Thi by a system of aerial cables and Decauville tracks.

La Pointe.—The deposit at La Pointe consists of many vertical veins. Certain of these veins have been followed for a distance of more than 100 metres and for a height of 80 metres following the slope. Their workable thickness varies from 15 to 1 metre.

The Nam-Van deposits.—These are situated about 250 metres from and consist of an exact extension of those of La Pointe. In all characteristics they resemble the above and consist of a series of parallel veins. The principal vein, of which the available thickness is from .50 to 2 metres has already been worked for a distance of 180 metres and for 20 metres following the slope. They are now about to ascertain its depth. Three other veins seemingly of equal value but appearing to be less continuous have been opened up.

The Phia-Khao deposit.—These are situated 800 metres north of those of Nam-Van. The ore is found in two fractures forming between themselves an angle of 45 degrees and in the mass situated between them where veins are found analogous to those at Nam-Van and La Pointe. The eastern fracture, called "Cassure des Dykes" has been investigated as to its depth, notably at hill 800, where there is shown a mineralization of an available thickness of 20 metres, 90 metres in length formed principally of silicates with rich metallic content. The workings which are arranged in step-like formation for more than 100 metres in height are as yet insufficiently developed (they were only undertaken in 1916) to permit of a very precise estimate being formed as to the constitution of the deposit. The tonnage of ore available seems to be considerable.

Production of the Zinc Mines of Tonkin for the year 1916

Name of the Mine or Mining District	Province	Production		Exportations		Average Richness of Ore	Personnel of the Mine			Observations
		Weight in Tons	Value in Frs. (a)	Weight in Tons	Value in Frs.		European	Asiatic		
								French Protégé	Chinese	
Trang-Da	Tuyen-Quang	10,900	2,200,000	11,900	3,400,000	Variable	11	11,001	—	Half of the production is calamine containing 50 per cent. zinc, the balance containing about 38 per cent. The ore is calamine exported to Japan
Yen-Linh	" "	3,760	1,080,000	2,210	630,000	48%	7	890	—	
Lang-Hit	Thai-Nyuyen	16,175	4,400,000	9,400	2,450,000	50%	16	1,032	—	The production is $\frac{1}{2}$ calamine to $\frac{1}{2}$ blende, Japan America Exports:—Calamine 3,000 — Blende 3,000 3,200
Cho-Dien	Bac-Kan	12,200	3,745,000	10,800	3,300,000	51%	14	580	168	
Thanh-Moi	Lang-Son	1,750	490,000	1,550	430,000	Calamine 56% Blende 52%	5	270	—	Calamine is the product. Exports:—Japan 6,800 tons; Swansea 4,000 tons. Consisting of $\frac{1}{2}$ calamine and $\frac{1}{2}$ blende Exports:—Japan 250 tons; United States 1,300 tons. The ore is calamine which was exported to Japan.
Poe-Van	Tuyen-Quang	3,240	1,020,000	1,600	502,000	52%	7	289	93	
Results of prospecting in various areas of search, and concessions.		800	200,000	730	182,000	"	2	200	—	
Totals		48,825	13,135,000	38,190	9,894,000		62	4,361	261	
								4,622		

(a) The value of the production of the zinc mines is given at Haiphong. It varies from Fr. 250 to Fr. 350 per ton for calamine containing 50% zinc with a variation of Fr. 7 per unit of metal more or less than that standard. The price of blende has never exceeded Fr. 250.

Bo-Pen Deposits.—The limestone peak of Bo-Pen, which contains the deposits which have been given the above name, is situated about 500 metres to the northeast of Phia-Khao. The principal deposit is a vein or mass, actually known to be more than 40 metres in height, with, at the south, an average workable thickness of 25 metres of good calamine, silicated and carbonated, and dividing towards the northeast into many veins of from 2 to 8 metres workable thickness, presenting a ferruginous and calaminous mineralization. The working of this deposit was undertaken at the end of 1916. In addition to these deposits there are known in the same region many out-croppings of likely appearance, such as those of "La Source," "Lung-Hoai" and "Bo-Luong."

Outside Installations of Ban-Thi.—These installations are still very elementary because the mine has only been worked since the beginning of the war. They comprise, however, 3 tub furnaces for calcination, two furnaces for dealing with small material and a workshop for repairs.

Production.—The production of calcined ore by the mines of Cho-Dien rose from 2,000 tons in 1914 to 8,500 tons in 1915, and to 12,000 tons in 1916.

The mines of Cho-Dien engage 15 Europeans, and 1,100 Asiatics, of whom 282 are Chinese and 836 are Annamites.

The Mines of Thanh-Moi

Thanh-Moi is a station on the railway from Hanoi to Lang-So'n, 78 kilometres from Dap-Cau. The products from this mining region are evacuated by rail to Dap-Cau and from there are sent to Haiphong by boats of 100 tons. The work of the Societe Miniere de Thanh-Moi (a limited liability company with a capital of Fr. 1,000,000) is actually carried out on the deposits of Long-Ro and of Quarter No. 3.

The Long-Ro Deposits.—This area, about 1½ kilometres to the northwest of Thanh-Moi presents along a length of about 600 metres a series of pockets, in the limestone, rich in blende and calamine which have supplied since the commencement of the working from 6,000 to 7,000 tons of ore.

The Deposit of Quarter No. 3.—This region, situated 1,500 metres to the southwest of Long-Ro, holds a deposit, in the calcareous formation, made up of a vein, showing rich zones connected with each other by veins of poorish ore. The proportions of blende to calamine are at 1 to 3, the latter also containing about 4 grammes of gold to the ton. The production from this region has reached about 10,000 since its exploitation was commenced.

In addition it might be added that prospecting by the company has discovered at Long-Sai a vein of calamine and blende, and at the point known as kilometre III they have laid bare two deposits of blende of 3 metres thickness and several dozens of metres in length.

The Mines of Yen-Linh

The Societe des Mines de Yen-Linh (limited liability company with a capital of Frs. 700,000) has been working since 1911 the deposits of the Kem mine, on the left bank of the river Claire, and contiguous to the mine at Trang-Da which has already been dealt with. Three deposits are actually being dealt with, those of Kem, Point 123 and Pia-Kha.

The Deposit at Kem.—This is a deposit of contact between schists and primary limestone running from north to south, but cut across by fractures running in all directions and at various angles. The minerals consist chiefly of haematite with a ferruginous calamine which passes rapidly to sulphides the deeper one goes.

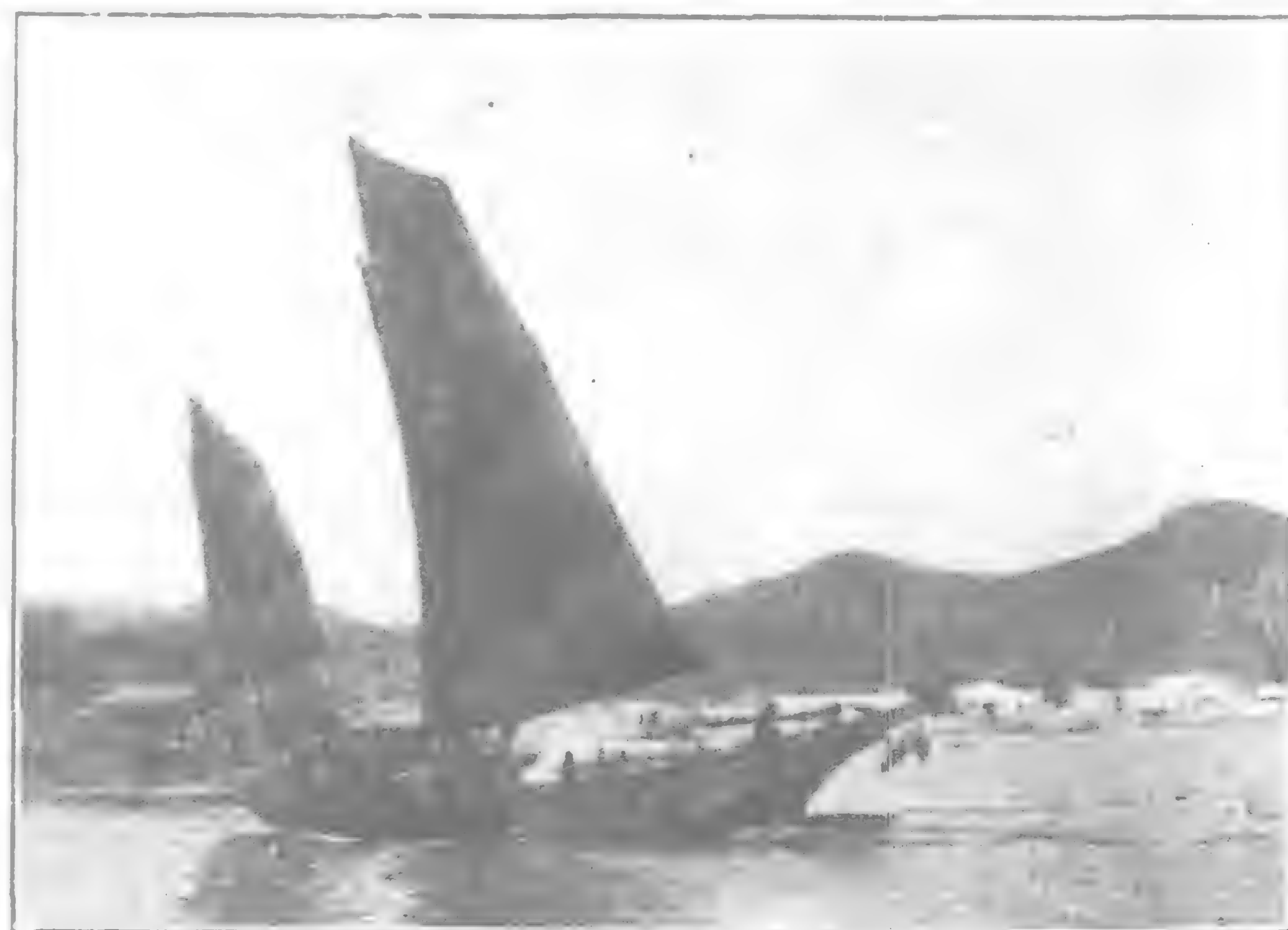
Point 123.—This deposit, found to be 70 metres in vertical height and followed for about 100 metres of its length, is interstratified in the compact limestone and traversed by numerous faults running E.C.S. filled with clay and calcite. The mineralization varying from nothing to 2 metres of workable thickness is in the top portion a good calamine which turns below to blende.

Pia-ka.—The principal mineralization consists of brown haematite and culamine with galena, ceruse in a barytic and

flinty gangue. The mines have produced since their commencement about 7,000 tons of saleable calamine. They employ 7 Europeans and about 900 Annamite workers.

We stop the description of the deposits of zinc ore in Tonkin though there are many others worthy of having attention drawn to them. We will mention on the Haut-Song-Gam, about 35 kilometres upstream from Na-Don, the mines of Pac-Van, which produced, in 1916, 3,000 tons of good ore, those of Bac-Lhung, Phuc-Ninh, Dia, on the River Claire on which the works are not yet sufficiently advanced, the mines of Cho'-Don, 10 kilometres southeast of Cho'-Dien which have been made the object of investigation and in which exploitation is for the present subordinated to the creation of an evacuation route, either towards the Song-Cau, or, preferably, towards the Song-Gam, for there they will be able to connect with the railway to Cho'-Dien, the mines of Phuc-Sam on the Haut-Song-Day, 30 kilometres as the crow flies east of Tuyen-Quang, the mines in the region of Na-ri, 25 kilometres east of Bac-Kan, those of Hung-Son near Thai-Nguyen, etc., etc.—Translated from the bulletin of the *Comite d'Assistance aux Travailleurs Indo-Chinois*.

Among United States Consular changes in China that have recently taken place is the transfer of Mr. Thomas Sammons from Shanghai to Melbourne, Australia. Mr. Sammons came to Shanghai as Consul-General in 1914, and, if unquestioned testimony were needed as to his stewardship during his period of office it is given by the leading British newspaper in Shanghai when it says "since that time he has done much excellent work officially and socially to the advantage of the American community of Shanghai, and in the direction of co-operation for the general welfare of the port. His forthcoming departure will not alone be regretted by his fellow nationals." When Mr. Sammons came to Shanghai he was not a new-comer to the Far East. He knew its problems thoroughly, having had sixteen years' service in the East, as Consul-General in Manchuria, Korea, and Japan. In Shanghai he flung himself heart and soul into the various problems of the Settlement, and particularly during the War did he give inspiring service to the rallying of Americans in a "get-together" movement, and later in the various steps taken to bring about British-American co-operation. Mr. Sammons leaves Shanghai with a record of good work done, and he carries away with him the respect and regard of residents, both foreign and Chinese. He will be succeeded in Shanghai by Mr. E. S. Cunningham, who comes from Hankow with a good record as Consul-General.



ON THE RIVER NEAR CANTON

A typical South China cargo and fishing junk. The huge mat sails, the rakish rig; the old woman usually at the tiller make a picturesque combination which no camera fiend can resist. Photo by U.S. Bureau of Foreign and Domestic Commerce.

Growth of the Chinese Textile Industry

American Manufacturers Share Largely in Expansion which Bids Fair to Double Production

Our readers have become familiar with the size and importance of the piece-goods and yarn imports into China—these items in normal times accounting for roughly a third of the whole import trade—and have also read of the huge quantities of yarn turned into native cloth in Chinese homes by the use of hand looms. Lately an actual shortage of cotton goods from abroad, the high price of imported cloth, and an awakened interest in home production of necessities have all combined to rouse the interest of Chinese capitalists in the spinning and weaving of cotton by modern processes. Spindles have been ordered in large quantities, and the two great producers of textile machinery—Great Britain and the United States—have booked orders for machinery at a rapid rate. In this article we have endeavored to give the story of the rapid growth of the trade, with particular reference to the American influence upon its expansion. In it we believe there is a lesson for the American manufacturer, who is only now beginning to learn that the opportunity for the sale of his products abroad is actually in existence but can only be secured by the application to his foreign trade of the same intelligence and industry which is applied to his transactions at home.—THE EDITOR.

* * *

In an article in the March, 1919 number of this magazine appeared an article* dealing with the Chinese trade in cotton and cotton goods. One of the paragraphs summed up its argument:

"As a consumer of cotton yarn, which is used largely for the weaving of native fabrics on hand looms of ancient pattern in homes, and lately in shops and small weaving establishments on manual looms made in Japan of wood or copied from Japanese models, China leads all the markets of the world. Her purchases of cotton cloth in the world trade are only second to those of India. On top of this, China ranks third in the production of raw cotton, with India first and the United States in the second place. Her cotton is spun by hand or in the steam power mills under Chinese and foreign management, and with the combination of foreign yarns is woven on small manual looms which are found in every community all over the country. The importance of cotton manufactures in the life of the Chinese can be appreciated when the total imports of a normal year (say 1913, as the first year preceding the Great War, with total purchases of 182 million taels or, at the exchange then current, some £27,600,000) are added to her domestic production. It is assumed that the native production of cotton goods at least equals the imports, and on this basis we arrive at an annual per capita consumption of something like a tael or about one gold dollar. This compares with the Japanese consumption of six yen, or three gold dollars, per capita; and this single instance reveals the possibilities of a trade that only awaits a small amount of social and economic progress to become doubled or tripled. Speculation might be carried to an indefinite length on the trade which had multiplied itself eight times in the 43 years between 1870 and 1913 and which in the twenty years between 1890 and 1910 had increased from 45 to 130 millions, and in the three following years had leaped to 182 millions. In one direction alone, that is by following the ratio of imports to exports, the cotton goods trade might easily double itself in the next few years. The important proviso is that exports continue their rate of increase, and now that war needs have forced a wider introduction of Chinese products it is highly probable that the world will look to China for a greater share of the raw materials which will be sorely needed within the next decade."

Since the time that article was written a condition then held as a bare possibility has become a reality—for the scarcity and high price of imported yarn and piece-goods have combined to sternly turn the attention of the Chinese capitalist to the production of yarn and cloth in his own country. While undoubted-

ly the import trade in both articles has yet a brilliant future there is a strong movement towards the production of cotton goods in China, which is revealed in the large number of mills now under order and under construction. These mills will not fall far short of doubling the present capacity of the Chinese industry. Mr. James Kerfoot, in his farewell address to the Chinese cotton mill owners this year, stated that if every person in China could buy an additional suit of cotton clothes per annum a hundred thousand additional looms and two million more spindles would be busied at the production of the necessary cloth. Shortly some 800,000 or more spindles will be on the way. It is not generally believed that prosperity has become so widespread in China that the extra suit can be afforded, or that anything like this condition has arrived; neither has the urban drift reached the stage where the production of cloth in country homes has been appreciably affected; so it would seem that China is getting ready to produce within her own borders the cotton cloth and yarn which she now buys from abroad.

Of course in the furnishing of the new spindles the British manufacturers are well to the fore. Their machinery has been long and favorably known to the Chinese; they are the pioneers in the business and the builders of the Chinese textile industry. Together they have rolled up a magnificent total of orders. One house has at least 116,000 spindles under way; another 150,000; and two others each 60,000—all orders taken lately. Add to this the old orders yet undelivered, and the British manufacturers have met half-way their American competitors on a fair and open field. Still it is satisfying, to Americans at least, that the American manufacturers and their agents have had such a great part to play in the expansion of the Chinese cotton industry.

However, it is of the American firms and their influence on the industry that we are writing now, for the enormous forward step they have taken in the textile machinery business within a few brief months is the wonder of the Chinese trade. As a matter of fact, the sales of one American firm alone, after the installation of the first mill, have numbered some 416,000 spindles. Most of these orders—all, in fact, but two or three—have been taken during the current year. Another American firm has under construction, or on order, spindles aggregating 75,000.

It was at the time of the reawakening of the Chinese people to the possibilities of home manufacture that the American manufacturer of machinery began to apply intensive methods to the securing of orders in China. It is true that for years past there have been occasional orders for them, but they were small and far apart. Even during the years of the war it was possible for American manufacturers to make an occasional sale. But their sales were always small. American manufacturers were sorely handicapped during the war in export trade, and it is doubtful that machinery could have been supplied had orders been taken in great numbers. In the first place, their capacity for production which was not used on war material was eagerly taken up by American cotton mills. In the second place, on top of their difficulties of production came the lack of shipping facilities and the shortage of labor. It was not until the current year that prompt shipments of complete plants became a possibility.

In addition, the Chinese knew very little of modern American mill methods. They were acquainted and satisfied with British machinery, and could get it. It was not until 1916 that the first large American equipment was ordered. Mr. Moh, a progressive Chinese who had received in America an education in modern methods, in that year wanted an American mill. He ordered and installed 10,000 spindles. After his plant had operated successfully a good many other Chinese spinners wanted machinery like it. Quick deliveries became possible in 1919, and orders began to

* "Piece Goods Profits Inspire Industrialism in China," page 271.

pour in. Mr. Moh had increased his original order for 10,000 to 100,000 spindles. To-day there are over 20 complete American mills under order, and five are under construction or are about to be put into operation. This remarkable development has come about well within the current year.

The whole story of the orders for new mills is told most graphically by the list of mills in operation and those under construction or under order. Behind it is the secret of the brilliant success of the American manufacturers after a long period of inaction. We believe that success was based on the intelligent application of energy and knowledge directly on the ground—and it has been our privilege to inspect progressive methods which confirm the belief. These orders were not easily obtained. The American manufacturers have been handicapped by the fact that British manufacturers can supply machinery favorably known to the Chinese at a price below their own. As a matter of fact, this price advantage was so great that in former years American mill owners found it profitable to use British machinery because even after the addition of 40 per cent. import duty it was much cheaper than that produced in their own country. The advantages of price and reputation persisted all through the war. The present boom in American machinery is not due to the war; it is most remarkable that only small sales and deliveries were possible during the war because of difficulties of production and competition; and the competition has been maintained unflaggingly even to this day.

Efficiency the Keynote of New Plants

Within the past few years the spinning and weaving industry in America has been so surrounded by stringent factory and labor laws that labor costs have mounted tremendously. The result has been that the keenest engineering minds of the country have concentrated upon increasing the efficiency of operating methods, with the natural result that their machinery has been developed to a fine state of perfection. Not only this, but upkeep expense has influenced the design of their machinery; for while operations which can be done in quantity by mechanical means can be performed cheaply even with high-priced labor, the fact is that hand labor used in such operations as making adjustments and replacing worn parts is extremely high in cost. So another result has been that the American machinery has reached the state where the minimum of individual attention is needed in its upkeep.

Confronted by keen competition, it was mainly on the basis of efficiency—after prompt deliveries became possible—that the machinery was introduced to the Chinese and found favor. But not on efficiency alone—for labor in China, while not exactly cheap, has not yet reached the point where its saving makes profitable large investment in labor-saving machinery. The success of the American manufacturers has not rested alone on the efficiency of their product, but upon designing and equipping the complete mill with the utmost of efficiency. For example, the mills now under construction are so arranged that there is no duplication of movement—so that the product, from cotton to finished yarn or cloth, proceeds in a straight line from start to finish. Buildings are provided with the proper amount of air, light and passage space. The use of cumbersome shafting and belting arrangements with their consumption of power has been done away with, and generally the latest engineering practice in home mills has been put into use.

A fine example of a modern plant is the Sung Sing Mill, of Shanghai, which is now under construction and nearly finished. It is an all-concrete structure with metal sash, wiring run in conduits and cast in the concrete, bases for all motors and machinery cast complete with bolts, and columns so arranged that the machinery exactly fits the vacant spaces. Machinery has been so placed that there will be no back-tracking in the handling of cotton and yarn through all the processes. Incidentally, the order for 25,000 spindles was placed on April 1, 1919; the building was immediately put under way; the delivery of the first lot of machinery was made August 15; and the remainder of the machinery was expected in September. Wiring is all ready, and it only remains to put into place the motors and machines on the bases provided, as the finishing touches are now being placed on the

building and the machinery is in its cases on the floor. The Sung Sing Mill should be in complete running order within a few weeks after this article is in print, when the agents of the manufacturer will hand over the key to the door of a running mill—the order for which was placed in April.

In short, the agents have sold a complete mill and service to back it up; for not only will the manufacturer provide five experienced American fitters to set up the machinery, but has already provided five young Chinese engineers, who have been through a course of training in his plant in New England following their technical education; and these ten men will constantly be in touch with the owner of the Sung Sing Mill and all the other mills which will be constructed. They will instruct the Chinese in keeping the machinery at the topnotch of efficiency and in the most efficient operation of their property, and for this purpose will be distributed over the country within touch of all the new mills.

One organization undertook the designing of the building and plant of the Sung Sing Mill. The most minute plans and specifications were prepared in Shanghai, and after approval the machinery specifications were forwarded to the United States and the building plans turned over to the contractor. The manufacturer put the specifications into the hands of his shop the day after they reached his office, and after that no additional instructions or exchange of cables or letters were found necessary. The construction of the building was supervised by the agents, and control of all construction and fitting will not pass from the hands of the agents until the mill is running and the key is turned over to the owners. After that the machinery will not be left in the hands of inexperienced fitters, for the interest of the manufacturer will be maintained in his machinery until in the future a more modern method will make it advisable to scrap it. The whole process makes a striking contrast to the old method of placing the order for each kind of machinery with a different manufacturer—the order for power with one, the order for shafting and sundries with another, and so on, while the millowner dealt with architects and contractors for the construction of a building designed by another organization.

The particular house which constructed the Sung Sing Mill has refused orders for their own make of machinery unless the right was given them of undertaking all the engineering tasks connected with the enterprise. They believe that the efficiency of machinery and plant, while an absolute necessity at home, is of prime importance in China, where labor costs are rising rapidly. They believe that Chinese labor is not efficient merely because it can be had so cheaply by the day, but only if it produces—produces yarn and cloth. Nothing is cheap, they say, unless results are attained; so their whole effort has been bent towards producing a mill of complete efficiency, and insisting upon undertaking the whole task of putting it into operation. They have orders for many other mills, and each will be built by the same standard.

It was intelligent application of American effort to Chinese problems that got the orders for them. For a long time the task seemed hopeless. Competition backed by deliveries and favorable reputation was unflaggingly in evidence. There was but one great advantage left to them when shipments could again be made and that was the argument of increased efficiency—and the sale of service rather than the mere sale of machinery. The manufacturers sent their best men to the field and worked hard. In the story of their success is a lesson to the American manufacturer who has attempted to secure orders from his desk at home. His first need is the selection of a good agent, and after that he must provide the same co-operation that he gives so abundantly to his salesmen and users at home; for there is no protection for him in the open markets of the world except his energy and application to business. The manufacturers of cotton working machinery have worked a brilliant success in China in less than a year. But the cotton industry is not the only promising one in China. There are mines to be worked, railways and bridges to be built, ancient processes to be modernized—no end of opportunity for the machinery manufacturer. There is enough business for all comers, and the American manufacturer can create new business for himself just as he performs the same feat at home. However, he must apply individual and special effort to the task here just as he does at home, and he must keep unfailingly at it.

China's Plant Gifts to America

Results of the Work of the Late Mr. F. N. Meyer

The excellent and important work done by the late Mr. Frank N. Meyer*, who has traveled widely in remote parts of China hunting for plants for the United States Department of Agriculture, and who was drowned in the Yangtze in June, 1918, forms the subject of a special article in the "National Geographic Magazine," by David Fairchild, Agricultural Explorer, in charge of the Office of Foreign Seed and Plant Introduction, U. S. Department of Agriculture.

Mr. Fairchild pays a deserved high tribute to Mr. Meyer, who was drowned "after nine of the most picturesque years that any one could imagine, spent in the dense forests of northern Korea, in Chinese temples perched on distant sacred mountains, and in wandering through the orchards, gardens, and cultivated fields of that vast Oriental country. . . wandering with a definite, soul-absorbing object, on foot, from village to village, inquiring his way and learning as he went of some new plant variety which, because of its perfume, the deliciousness of its fruit, the color of its flowers, the shade it cast, its alkali resistance, or its hardiness in bleak northern regions, might be worthy of sending to this country for our farmers, horticulturists, or lovers of dooryard plants to grow.

As Meyer stood before one of these new plants to which chance and his flair for new things had led his footsteps, he tried to picture in his imagination the region in the United States where it would grow; to wonder in what particular it might prove better than that which Americans were then cultivating, and what use they would make of it after it developed to full size and produced its fruit or flowers. It was his business to look ahead and predict the future of his discoveries. His was different work from that of the botanical explorer who collects for a museum, who is only looking for species that are new and have never before been collected and placed in the great herbaria of dried specimens.

Chinese Plants Flourishing in America

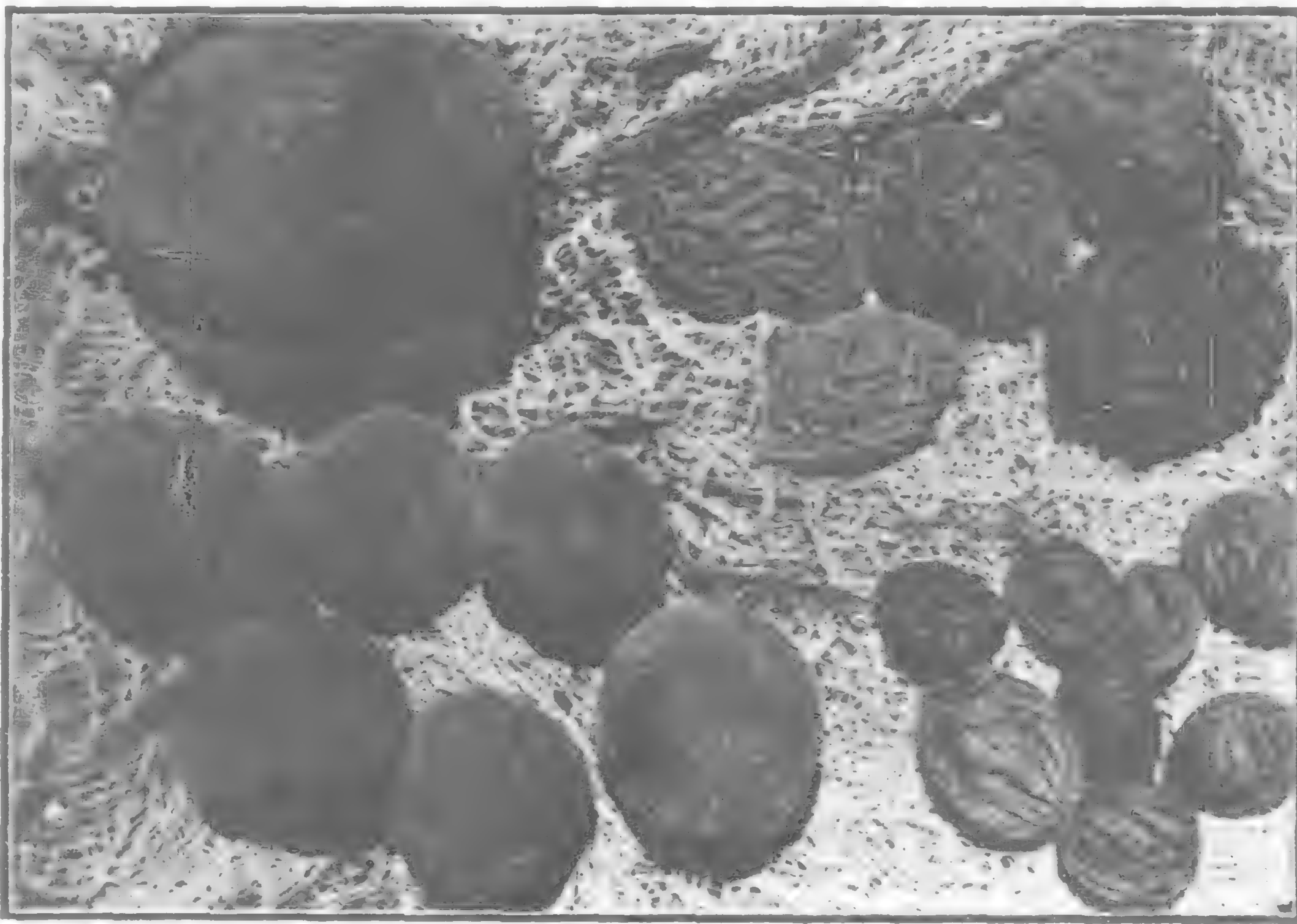
"He sent in hundreds of shipments of living cuttings and thousands of sacks filled with seeds of the useful plants of the countries through which he traveled, with the result that there are now growing in America fields and orchards and avenues and hedges of Meyer's plants, which could he only have lived, would have gladdened his heart and made him realize in a tangible way what a great pioneer work he was doing.

"In addition to the actual introduction of seeds and plants, Meyer has rendered great service to our horticulture by showing us what the Chinese have done to improve their native fruits. They have developed their native persimmon from wild, inedible forms to varieties four inches in diameter and delicious as fruits can be; their native hawthorns they have made as large as small crab-apples, with an excellent flavor and texture all their own, suiting them peculiarly for preserving, and out of the native jujube or *ts'ao* they have evolved scores of varieties, some of which are as large as apricots and with a flavor which puts them when candied into the class with the Persian date.

"His first expedition in the years 1905-8 was into North China, Manchuria, and Northern Korea; his second in 1909-11 through the Caucasus, Russian Turkestan, Chinese Turkestan and Siberia; his third, in 1912-15 through North-western China into Kansu Province to the borders of Tibet, and his last expedition in search of plants began in 1916, when he went in quest of the wild pear forests in the region of Jehol, north of Peking, and the region around Ichang.

"Meyer's letters are the letters of a real traveler. When written from cold, dirty inns, they reflected his surroundings of discomfort; from the sublime mountain tops or mountain passes of the Caucasus they were filled with his quaint philosophy of existence. From Buddhist temples in the Kansu Province of China, on the borders of Tibet, they gave pictures of that strange civilization forty centuries old.

In the course of a letter from Peking, dealing with his search for the famous Peking pear tree Mr. Meyer says:—



WILD AND CULTIVATED PEACH COMPARED AS TO SIZE OF FRUIT AND STONE

"The last day of the year found us on the road in search of the famous Peking pear for which I have been looking ever since I came to China and for which fruit I made quite a few trips in vain. I didn't strike it until New Year's Day, but then my joy was great to start the year in such a nice way. I procured a whole lot of scions from this pear and from other varieties. . . . These pears will probably give us an entirely new strain of this fruit. The soil is rather sandy where these pears grow, and a short distance from the orchards it seems to be entirely sand. . . . On January 2 we proceeded on donkey back to the mountains

* See "China as a Most Promising Field for Plant Exploration," FAR EASTERN REVIEW, July, 1915.

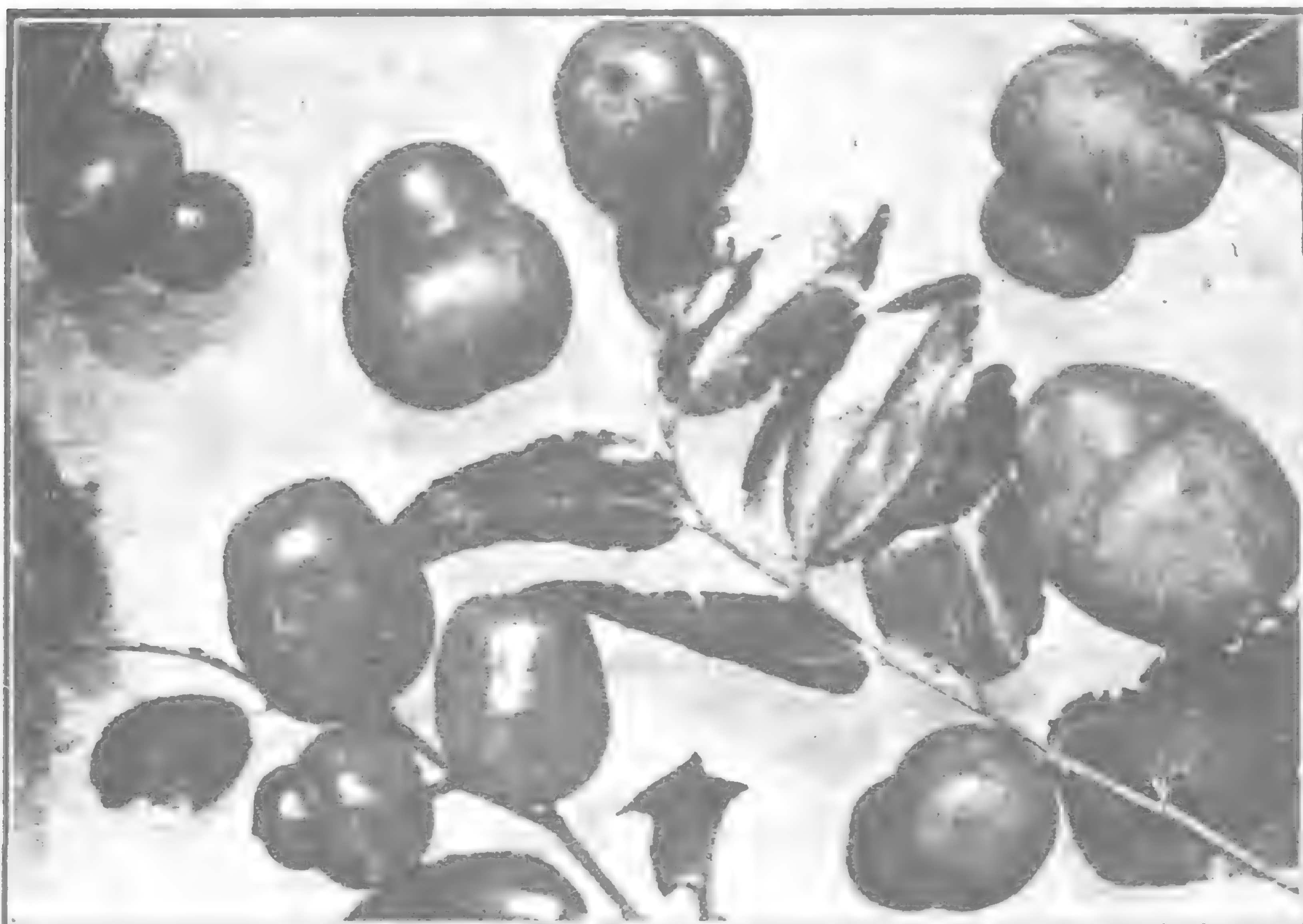


THE LATE MR. F. N. MEYER

near Fang-shan. . . . I found in these mountains genuine wild peaches and apricots growing between the rocks. It seems that there are several varieties of these peaches. . . .

A Chinese Hothouse

"Besides outdoor plants, the natives have hothouses constructed of sorghum stems heavily plastered with mud and with vertical paper windows on the south side only. They are heated by flues, and to keep the air moist large open vessels filled with



THE MOTHER-IN-LAW JUJUBE (*ZIZYPHUS SATIVA*). WHEN DRIED CLOSELY RESEMBLES THE PERSIAN DATE

water are placed at short distances from one another. In the forcing houses, also, large open vessels are kept filled with liquid nightsoil so as to promote a healthy growth. That the atmosphere in these places is far from being pleasantly odorous, one may imagine. To my amazement I saw forced cucumber plants with nice cucumbers hanging on them. If a young cucumber shows a tendency toward being crooked, the Chinese simply hang a piece of stone tied to a string, on it and force it in that way to be straight. If we could only do this thing to crooked people, too! I asked the price of these cucumbers and was told fifty cents apiece (Mexican). So this proves that Chinese can afford to pay much for these luxuries. They do not grow their cucumbers in benches like we do but have a few plants in a pot, first in a little soil, and when the plants get older, more earth is added. . . . A totally novel industry was the forcing of onion sprouts. There was one house just chucked full of these. The temperature inside was about 90 degrees F., . . . Eight coolies, half naked, were working among the plants and a furnace was burning."

Writing from Taianfu, Shantung, he says:

"Yesterday I returned from a hurried trip to Feicheng, bringing back with me eight grafts of trees of the famous *Fei* peach. We had much trouble in getting these peaches as the people demanded the most fabulous prices; for instance \$40 and \$50 per tree. My interpreter, through some diplomatic dealings, got a plot containing eight trees for \$40, but we had to leave Feicheng hurriedly, because the relatives of the man who sold to him had not been consulted, and they wanted to take the trees back or destroy them. Two of the trees are safely on the road to America now, however, and the others go with me to-morrow."

Gooseberry, Rhubarb, Pineapple and Guava in One

"Here I am sitting in a small hole of a town, all surrounded by high mountains on which a slight snowfall has been deposited during the past night," begins a letter written from a place designated as six days' march west of Ichang, Hupeh. . . .

"I am highly pleased with the *Yang tao* (a smooth variety of a native fruit), and the more I see of it the more thoroughly convinced I am that it is a coming fruit for the southern United

States. The fruits keep well into the winter and they ship well, especially after having been subjected to a few frosts, they are of excellent flavor, being a combination of gooseberry, rhubarb, pineapple and guava. They have the habit of setting one's teeth on edge, just like pineapples and blueberries, and they are laxative! But the vines are not hardy. Where one finds them growing well, one notices coir palms, loquats, privets and bamboos around the farmsteads. Zero temperatures may hurt them badly I am afraid.

"The plants also will have to be grown like muscadine grapes, that is, on high arbors—and they might have to be bruised to make them bear heavily. In the wild state, at least, I noticed that plants subjected to strong mountain winds, which twist them around at times, bore much more heavily than those growing well sheltered. I am sure that in the rolling sections of the Carolinas, Georgia, northern Florida, etc., where loquats survive for ten or more years, the *Yang tao* will do well, and, of course, in many parts of California, it should thrive too."

Chinese Trees and Fruits Flourishing in America

Mr. Fairchild continues: "It would be inappropriate here to give a complete list of the hundreds of plant species and varieties which Meyer sent into this country. But when the roses bloom in New England, his *Rosa Xanthina*, the hardiest of the yellow bush-roses, will be a mass of pale gold. When the ground thaws on the bleak plains of the Dakotas, thousands of his Chinese elms will put out their leaves and take their place in the wind-breaks of that treeless region. All the way up from Florida and Georgia and over the Canadian border this elm is now growing—a remarkably adaptable tree.

"His ash from Kashgar will spread its branches over the alkali soils of Nevada. When cherries are ripe in California, his *tang si* cherry will be the earliest to ripen by a week or ten days.

"The peach-growers of California are watching orchards now five years old, the trees of which all have for their root systems those of a wild Chinese peach which is resistant to draught and alkali and which Meyer found was in common use as a stock by the Chinese.

"As the autumn peaches ripen, the trees of the *Fei* peach will attract unusual attention, for it is the pound peach of the Shantung Province and bids fair to take a special place among the canning peaches of this country. It was so rare a variety, and living peach budwood is so hard to ship, that Meyer had to make two long special trips of several weeks on foot to get it.

"In parks and cemeteries, wherever it will grow well, the globular-headed willow deserves to find a place, and the first specimens, now growing at Chico, California, and on the banks



CHESTNUT TREE AFFLICTED WITH BLIGHT THAT IS OVERCOMING CHESTNUT OF UNITED STATES. THIS TREE OF CHINA IS MORE RESISTANT AND MAY REPLACE AMERICAN ONE

of Rock Creek Park, in Washington, D. C., are worthy of a special visit.

"The curse of pear-growers is the fire blight, which often ruins the growth of years in a single season by killing the twigs and branches, and even the trunk of the tree. Just how far the hardy Ussurian pear, sent to us by Meyer, will prove to be immune to this disease we do not yet know; but Professor Reimer, of Oregon, who is an authority on the subject, declares it is the most resistant of all the species of the pear genus.

"Until Meyer brought back the grafted varieties of the Chinese jujube and we planted an orchard of them in California, the name itself recalled only the jujube paste of our fathers' time, which was used for coughs and colds. It bore no relation to the fruits, as large as good sized plums, which, when processed, are as delicious as Persian Gulf dates.

"When the boys and girls go chestnutting and see with growing concern that their favorite chestnut trees are dying and realize that unless we do something theirs may be the last generation to have the pleasure of gathering these most interesting of all nuts, it may be a comfort to them to know about the little Chinese chestnut trees which Meyer has introduced and which are very resistant to the chestnut-bark disease. While this Chinese chestnut will not take the place of the American chestnut as a timber tree, we may expect from it an abundance of good, sweet chestnuts.

"In our hot summers, spinach, that most popular of vegetables, does not grow, but Mr. J. B. Norton, through careful selection, has produced a strain, which he calls 'Manchuria,' from seed which Meyer gathered in Manchuria.

"Guarding, as it were, the tomb of the great Confucius, stands a century-old tree of the Chinese pistache. In summer it casts a dense shade, and in autumn its scarlet foliage makes the landscape brilliant, like the oaks in the Berkshires. There is now an avenue of these superb trees forming the entrance to our Chico Plant Introduction Garden, and it has already begun to furnish ample seed supplies to plant the country.

"The white-barked pine, one of the most striking landscape trees of China, its brilliant white trunk contrasting with its dark-green needles, we have scattered by the hundreds through the drier regions of this country from large quantities of seed which Meyer secured. One of them is growing over the grave of the most enthusiastic plant lover of all of our diplomats, the late W. W. Rockhill, U. S. Minister to China.

"Imagine the old age which such a hunter as Meyer might have had when in place of fading memories of forest encounters he could put his hands upon the trunks of great trees grown from tiny seeds which he had collected in his travels as a young man, or see with failing eyesight the masses of flowers produced by shrubs and trees which he first saw on the mountain tops of China!

"To those who chase through life from one adventure to the next, heedless of whether they leave a trail or not, this may, perhaps, appeal but little; but to those who look ahead, imagining a better world here on this wonderful planet, the idea of having so definite and tangible a share in its enrichment must be very satisfactory.

"While without the hearty support of a force of men and women who have cared for his introductions, Meyer's work would have been impossible, it is fitting that his name should stand out prominently, for his was the pioneer's work and it depended peculiarly on his individual initiative.

"Meyer's life activities have ceased, and the real causes of his death will always be a mystery. He came to this country a Hollander, a gardner by profession; he became an American citizen and he has given to this land of his adoption a host of lasting benefits."

Primitive Hydraulic Hammers in Korea

In the course of an interesting article in the "National Geographic Magazine," on explorations in unknown corners of northern Korea, Mr. Roy Chapman Andrews, of the American Museum of Natural History, and author of "Camps and Trails in China," "Shore Whaling," etc., describes the primitive use of



THE HAMMER AS IT RISES FROM THE MORTAR

hydraulics by Koreans in the crushing of grain. In the valleys of the picturesque hills near the Tumen River Mr. Andrews saw water-hammers rising and falling ceaselessly everywhere, like things of life. "The hammer is constructed from a 12-foot log, one end of which is hollowed deeply, the other being weighted with a heavy post set at right angles to the shaft. The log is so placed that its concave end will rest under a stream which has been diverted to flow in the desired direction, and a tub for the grain is sunk deep into the ground, where the post will fall within it.



THE HOLLOW OF THE HAMMER FILLING WITH WATER

"When the concave portion is filled with water the log rises and the water is tipped out; the opposite end then becomes heavier and the pestle falls into the tub beneath it; thus the hammer alternately rises and falls so long as the water flows. This invention probably came from China and is not found in the southern or central parts of the peninsula."

The Shanghai-Nanking Railway is now carrying upwards of 70,000 tons of freight monthly. The Railway now finds itself unable to carry the traffic with its present rolling stock. Engines are running between 5,000 and 6,000 miles monthly, or more than double the mileage done on European lines. Goods wagons loaded at Nanking in the afternoon arrive at Shanghai the next morning, are promptly unloaded, and are on their way back to Nanking the same afternoon or evening. The expansion of the Railway's freight business is all the more remarkable when it is remembered that water routes compete with it throughout its length.

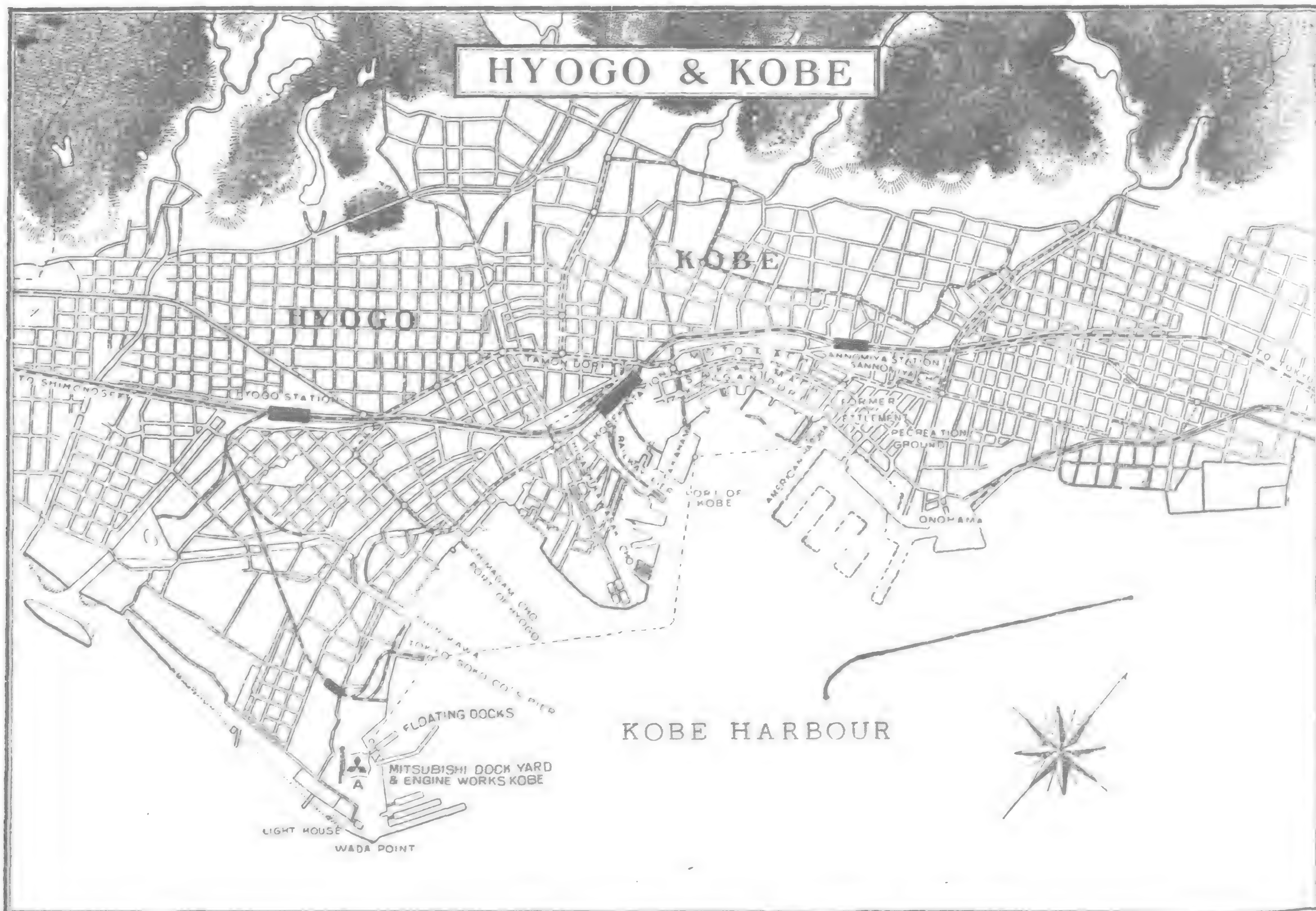
Kobe's Harbor Works Near Completion

In 1907 the foundation stones were laid for the construction of four new piers in Kobe Harbor. September 16 was the twelfth anniversary of this occasion and the work, as originally planned, has been nearly completed. The ample accommodation afforded by these splendidly constructed piers and those to be added hereafter will make Kobe one of the world's great ports, and it is already the foremost port in the Japanese Empire. These new piers are to be used solely for the ocean services, while piers almost equally commodious are being provided between Kawasaki and Wada Point for vessels engaged in the coasting trade.

Piers Nos. 2, 3 and 4 of the four massive structures opposite to the American hatoha. are each 1,200 feet long, with basins between 480 feet wide, while No. 1 is inclined to the others, and to bring the extremity in alignment there is an increase in length of another 90 feet, making it 1,290 feet in length. As one quay of both the piers 1 and 2 is dredged to the depth of 36 feet below the mean low-water level, each can accommodate alongside vessels of the largest tonnage that has so far visited the port. The depths of the others is 30 feet. Between the third and fourth pier, there is a small basin in which the ferro-concrete apparatus stands, and from where the great hollow blocks are floated off before placing in position and filling up, and the whole of this portion is to be reclaimed. The total amount of reclaimed land will amount to about 70 acres. As the surface area of these jetties is extensive it has afforded ample space for the construction of the much needed sheds for the housing of cargo, eleven of which have been completed, and in addition to which there are under construction another five, one of which is still under construction but will be

finished by next November. The other five structures are to be built on pier No. 3, making an aggregate total of sixteen, with a combined area of 17,216 *tsubo*. All the roads in the vicinity of these piers are being macadamised, the majority being already finished. The working of cargo is greatly facilitated by having the railway lines leading to the end of each of the quays, all of which have been completed with the exception of the metals to No. 3 pier. By this railway system, connections are effected with Onohama station, and the roads will join those of Kano-cho and Kyobashi. The reason that this latter pier is not in the same state of completeness as the others is owing to the fact that whilst these new arrangements were being carried out it was necessary to have temporary sheds built for the housing of materials. These, however, will be eventually replaced by two permanent sheds built on similar lines to those on the other wharves.

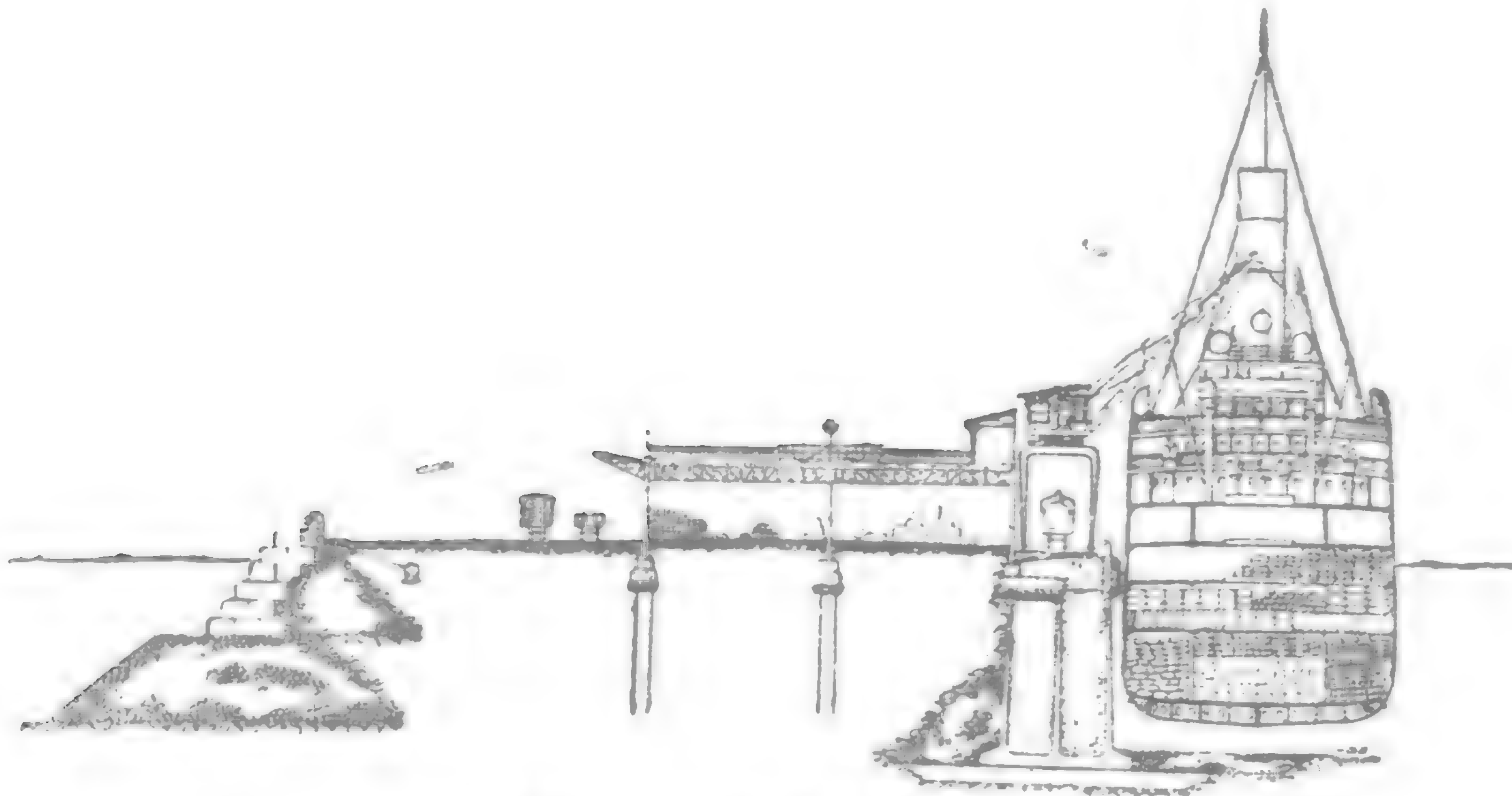
No. 1 pier is half the width of the others, but will be enlarged to the same dimensions when the new scheme, which has already commenced, for the construction of an additional two piers further east, which are to run parallel to the ones mentioned, is completed. This scheme will take a long time to mature. It is estimated that it will take ten years for this and the construction of the new breakwaters, which is included in the scheme, to take effect, and the control of the work has been transferred to the care of the Home Department according to the official regulations revised in April this year when work was begun. The estimated cost of this new work, we are informed by Mr. K. Morigaki, the Engineer in charge, will be Y.32,000,000.



KOBE HARBOR

Ten electric cranes of 1½ tons lifting capacity each have been installed on the four piers, and five more electric cranes of five tons lifting capacity are still to be installed.

Since October 1913, 3,059,389 tons of shipping have made use of the Customs Piers and the cargoes loaded and unloaded amounted to 2,429,134 tons. Particular mention may be made of the fact that during January and August this year, the tonnages of steamers and cargoes amounted to 990,797 and 941,519 tons respectively.



SECTION THROUGH NO. 1 PIER

The new breakwater so far constructed is 3,792 feet long. The material used is ferro-concrete and at each end beacon light-houses have been placed. The intention of the authorities under the new scheme which has been previously mentioned is to extend these breakwaters still further in both directions with suitable openings, an extension of 5,700 feet out to sea, an opening of 900 feet between this and the main breakwater which is at right-angles to this and which is to run nearly to Wada Point where another opening is left, enclosing an area the greater part of two square miles. The estimated cost of this is Y.10,000,000.

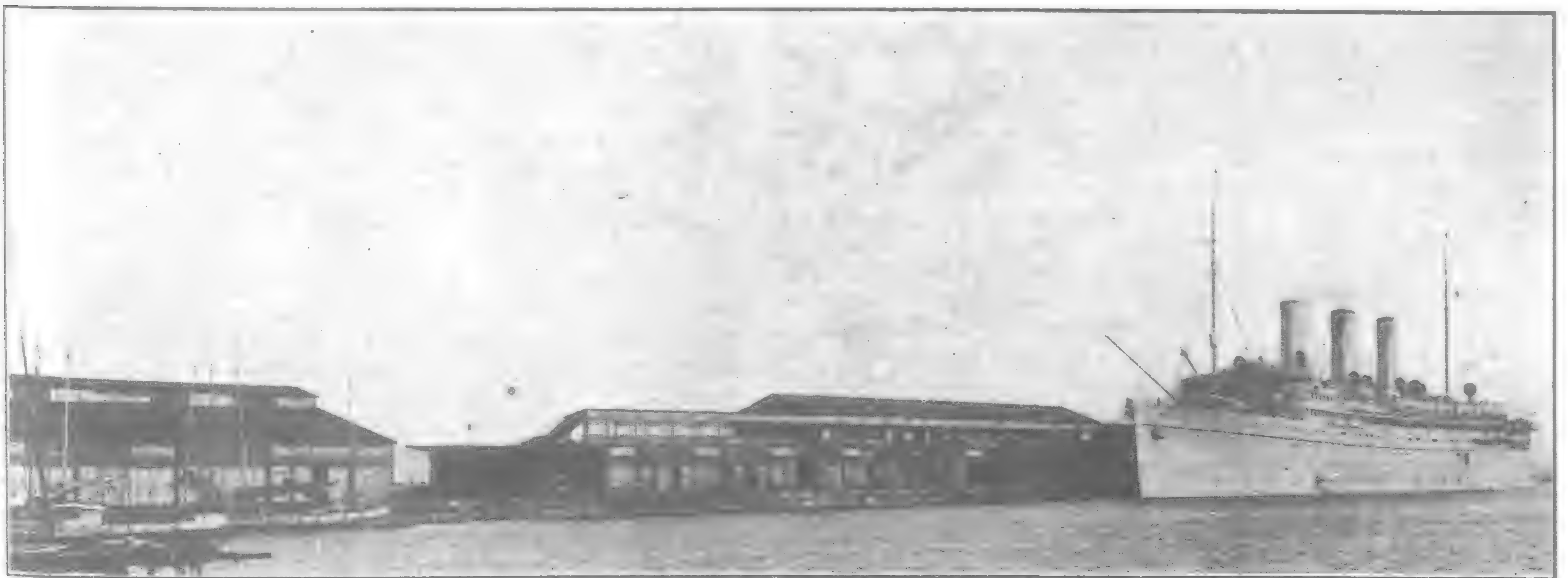
It is unnecessary to point out to anybody familiar with Kobe harbor since older days the enormous difference which all these new works make to the port. Kobe harbor, as chosen by the original foreign settlers, possessed few of the qualifications of a good harbor except good anchorage with deep water fairly close to the land, and a tide not too variable to allow the approach of barges and launches to the piers at all states of the tide. But it was uncomfortably exposed, and its chief attractions were the rapid handling of cargo by the stevedoring firms which foreign trade brought into being. The new works up to the present time are still in the stage of promise rather than of fulfilment. The breakwater, for instance, being on the side from which the typhoons do not blow, is more of a trap than a protection, and the driving up of the sea by the high winds has been known to

flood the sheds on the new piers and do any amount of damage, besides rendering the position of ships exceedingly precarious. But this will be altogether changed by the completion of the series of breakwaters, which will provide an immense area of protected water where ships may ride in safety in all weathers, besides providing protection against the flooding of the pier sheds. Another matter in which the works must needs await completion before they will be fully appreciated is that of railway connections. At present these are somewhat primitive, and the chief effect so far of coming up to the pier is to delay the ship because it means working cargo on only one side instead of two. When railway communications are perfected the advantages of quick railway loading and transit will compensate for this. Not but what this has been a matter of dispute. A very large part of Kobe's imports are destined for Osaka, and some critics hold that unloading on to piers only involves extra handling as well as loss of time. But this, no doubt, was taken into consideration by the authorities, and as the present tendency for development is for the whole shore between Kobe and Osaka to become one big industrial town, the demand for railway and steamer connection will, no doubt, increase to the full capacity of the provision made. Besides, for such unloading into lighters as is still demanded, there will be a protected harbor where it will take much worse weather to stop work than suffices at present to make a compulsory holiday.



THE KOBE BREAKWATER UNDER CONSTRUCTION

The works have been undertaken in the faith that Kobe will become a far greater port than it has been hitherto. It is fortunate that so much was done while labor and material were still pretty cheap, and the great port that is to be will owe its greatness to the farsightedness of those who were not afraid to plan for big things.—*The Japan Chronicle*.



THE NO 1 PIER IN USE—"EMPRESS OF RUSSIA" ON THE BERTH

Remarkable Scheme of Industrial Education for China

China's greatest need is industrial education! This is the opinion expressed by Professor C. W. Woodworth, Professor of Entomology, University of California, who has been in China for the past year, in the course of an article announcing the introduction of an important departure in education. He says: An efficient system of industrial education must be introduced which will make the people of China effective and prosperous. Such a system must be developed largely in China if it is to be properly adjusted to the needs of the country. There must be close conformity of the teaching materials and methods with actual practice. The good features of the apprentice system must be incorporated into school work so that practical skill and economic efficiency may be conferred on the student instead of the opposite of these, which is too often the outcome of school training. There must, however, be something a great deal better than the apprentice system in the production of greater versatility and a broader outlook on life. It must be more certain than the apprentice system in providing able teachers and in guiding the student into the class of endeavor for which his natural inclinations and powers best fit him.

To bring about these improvements it will be necessary for the schools of the future to acquire the tools and equipment of the modern factory and to operate the plant on a sound business basis. The standard for teachers will consequently have to be raised and the school will have to assume the risks of modern business life, and control capital, to an extent not heretofore attempted. Schools must also be united into a system modelled on the organization of a modern business corporation in the place of the loose plan of inspectors and supervisors, which seems to tend to the suppression rather than the development of the initiative of the teachers and to produce uniformity in the place of efficiency, which requires diversity, since teaching is an art and not the manufacture of a standardized product.

A New Type of Mission

An attempt to carry out these ideals is to be made. The proposed Industrial University will be organized on the broad lines mentioned as a contribution towards the realization of this great need in China and elsewhere. The plans originated in China, and the first organization to promote the enterprise was composed of Chinese teachers, and it is expected that the institution while by no means limited to China will find in this country the opportunity for early and rapid development. The expectation is to secure the necessary initial capital and the first teachers in America, and to launch the enterprise as a Christian mission. Among missions it will differ from those now operating in much the same way that it will differ from ordinary schools.

The work of the Industrial University as a whole will include everything now well done by other missions and other schools, but not in such a way as to compete with these institutions. It will be chiefly a mission devoted to the physical needs of man, including his health, his mental growth and his economic success. The Industrial University has been planned with a view to minimizing misdirected effort in making too many teachers, preachers, lawyers, and doctors and diverting minds which should have been leaders in the various lines of business, manufacture, or other physical activities according to the needs of the world to-day. It will supplement the work of existing institutions, and will do this in one way by providing capital, assuming financial risks, securing specially trained teachers for temporary or continuous service, and giving the use of its world-wide business organization for the sale of commodities and/or the purchase of supplies. The organization will be world-wide because the need of industrial education is not limited to any one country. There will be branches in all parts of the world, the common language being English, and there will be a continual interchange of membership between the various branches.

Creation of New Industries

The University will endeavor to avoid competition with the existing industries of the country by limiting as far as practical

its activities, aside from providing for its own wants, to the three classes of enterprises: (1) Endeavoring to replace imports by products manufactured in the country. (2) The manufacture of goods which can be profitably exported, and (3) the development of new industries.

The amount of imports into any country ought continually to increase, but everywhere there are products which occupy the tonnage of our ships that could equally well or better be produced in the country to which they are sent. The manufacture of such things should prove particularly profitable because if done equally efficiently the profit is larger by the amount of the cost of transportation.

The amount of exports is a gauge of the prosperity of a country. Any broad plan for the improvement of the financial condition of a people must include means of increasing other exports. The Industrial University in each country will therefore endeavor by all means to cater to the markets of other countries and will organize the machinery to study and exploit these markets.

The development of new industries is the measure of the progress of a people and the Industrial University plans to protect and develop the constructive contributions of its members in the fullest manner possible. All such things add to the total wealth of the world and should be fostered in a systematic manner. Many ideas and inventions are now undeveloped and lost to the world because of the lack of co-operation between the inventor and the man with business sense, capital or mechanical skill.

Profit-earning Scheme

The Industrial University will be so organized that this co-operation will be brought about and the members of the institution will reap the financial profits that will follow.

All profits will accrue to the individual members. The University will not become rich as an institution. It will not acquire property that cannot be made to yield a revenue and will dispose immediately of anything that ceases to be productive. All that it owns will be covered by bonds owned by members to whom it must return interest. The members may become wealthy but if they do it will be as individuals, not as a community.

The acquiring of wealth will not change the status of a member as regards his duties or obligations. Just as in any other school, all must study and all must work without distinction as to wealth. The effort will be made to have the life of all within the institution more attractive in all respects than anything that money can buy outside and to the extent that this effort succeeds the institution may develop into a socialistic community. If this does happen it will be only because the self-interest of the members holds them together. As in any other school that which draws the members will be the advantages it has to offer. They must go from other schools because they must make their living or because the school does not make provision for the indefinite continuation of study. Here the teaching is intended to include everything necessary to life and has, therefore, no inherent limitations. However whether this be the result or not, the kind of institution is that best calculated to fit a man for life either within or without the institution, since it involves the doing of practical things in a practical way.

While the stress is thus laid on things that can be measured with money we believe that this is the best way to lead to the higher and finer things of life. After the material things are conquered, after one has learned efficiency in earning his daily bread, he will have the time and the power and the inclination to also pursue those things which are more than bread. We believe that this follows from the natural God-given instincts of man, that it is the natural reaction which will follow from the self-wrought relief from the limiting environment which we wish to ameliorate. We believe that this Industrial University will not be built upon the sands but on the firm foundation of wise and true philanthropy, contributing in a most effective way to the abundance of the life eternal.

Some Suggestions for a System of National Highways in China

By P. T. CHOW, EXPERT IN THE MINISTRY OF INTERIOR, PEKING

The importance of public highways to social, political and economic development is too well-known to need explanation. In the more enlightened countries of the East and West, huge sums of money have been spent on road building. It is high time that China should align herself with these countries in this respect. But the outlay for a complete system of both national and provincial highways is too great for China's present resources. It is, therefore, deemed expedient that at the outset only national highways should be attempted, leaving the provincial highways till a more opportune moment. The following plan is suggested with this idea in view.

1.—IN THE MATTER OF ORGANIZATION.

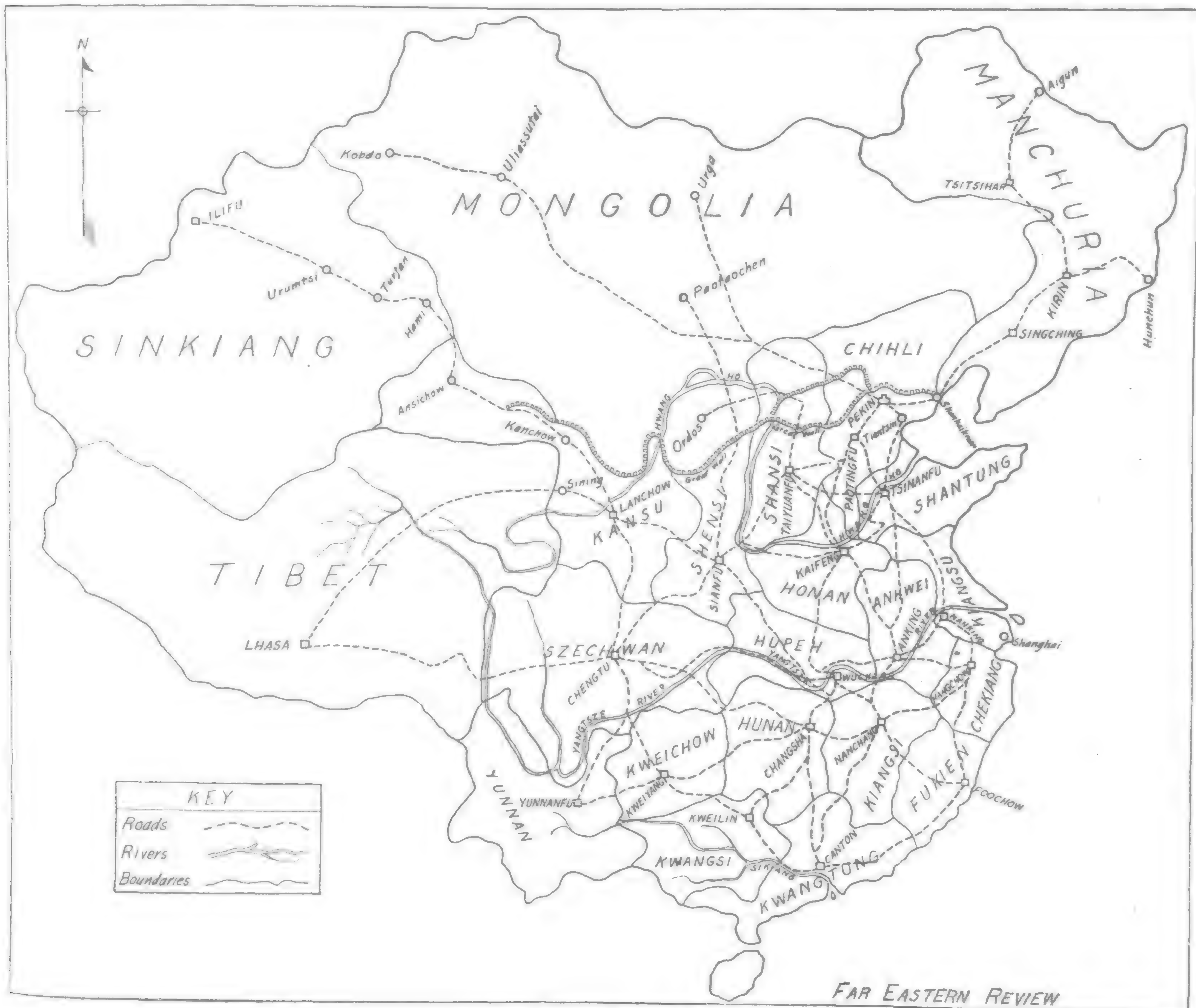
(a) We suggest that the Government establish a National Highway Bureau to work out a system of national highways. Sub-bureaux should be established in the provinces wherein high-

ways are to be built. These sub-bureaux should have direct charge of the surveying, designing, and construction work.

(b) We suggest that the National Bureau be composed of three departments: (1) The General Affairs Department, which is to have charge of documents, accounts, business transactions and matters that do not pertain to the other Departments; (2) the Engineering Department, to look after surveying, designing, construction and the like; (3) the Land Department, to be in charge of the investigation and appropriation of land for highway purposes. The sub-bureaux should be modelled after the same plan.

(c) We suggest that surveying parties be formed and placed under the direct control of the National Highway Bureau and jointly under the sub-bureaux within whose jurisdiction they are located.

(d) We also suggest that engineering parties be formed and similarly placed. The chiefs and others of the engineering par-



ties, however, should as far as possible be selected from the retired military officers or skilled foremen who have had extensive engineering experience abroad, and the common laborers from disbanded soldiers. This will serve as a step towards disbandment of troops as well as a measure against unemployment of returning laborers.

2.—IN THE MATTER OF CONSTRUCTION OF PRINCIPAL HIGHWAYS.

We suggest that three kinds of highways be built: (a) Those connecting Peking with the provinces and other administrative areas; (b) those connecting the capital of one province with those of other provinces; (c) those having military and naval importance. These three kinds of highways should be treated as highways of the first class, and should be a width to allow motor traffic, *i.e.*, the width should be at least 50-ft., which, only in special cases, may be altered. The following is the proposed net work of national highways based upon the old post roads. There are two reasons why the old roads should be followed: (1) because they were the shortest cuts between communicating points; and (2) because less expense will be required in laying out the highways, as the old road beds are still there and government lands may be found on both sides of them. According to the plan proposed there will be altogether 51 highways with a length of 93,000 *li*. The details cannot be decided upon till actual surveying is made.

No.	Highway	Starting point.	Terminating point.	No. of Li.
1		Kaifeng, Hunan,	to Peking	1,495
2	"	"	Anking, Anhwei	1,270
3	"	"	Sian, Shensi	930
4	"	"	Tsinan, Shantung	450
5	"	"	Wuchang, Hupeh	1,195
6	"	"	Taiyuan, Shansi	850
7	"	Peking, Chihli.	Tsinan, Shantung	930
8	"	"	Taiyuan, Shansi	1,150
9	"	"	Kobdo	6,280

N.B.—From Peking to Kulun the distance is 2,880 *li*; from Peking to Uliassutai, 4,960 *li*; from Paoting to Kulun 3,210 *li*; from Paoting to Kobdo 6,610 *li*, and from Paoting to Uliassutai 5,290 *li*.

No.	Highway	Starting point.	Terminating point.	No. of Li.
10		Paoting, Chihli.	to Mukden, Fengtien	550
11	"	"	Tsinan, Shantung	570
12	"	Fengtien	Huntsun, Kirin	970
13	"	"	Anhun, Heilungkiang	1,490
14	"	Anking, Anhwei.	Tsinan, Shantung	1,340
15	"	"	Hangchow, Chekiang	640
16	"	Hangchow, Chekiang.	Minhsien, Fukien	1,030
17	"	"	Nanchang, Kiangsi	1,140
18	"	Anking, Anhwei.	Wuchang, Hupeh	610
19	"	Wuchang, Hupeh,	Changsha, Hunan	850
20	"	"	Sian, Shensi	1,410
21	"	"	Chengtu, Szechuan	2,120
22	"	"	Nanchang, Kiangsi	790
23	"	Anking, Anhwei.	"	670
24	"	Nanchang, Kiangsi,	Minhsien, Fukien	660
25	"	"	Canton, Kwangtung	1,550
26	"	"	Changsha, Hunan	730
27	"	Minhsien, Fukien.	Canton, Kwangtung	1,520
28	"	Canton, Kwangtung.	Changsha, Hunan	1,230
29	"	"	Kweilin, Kwangsi	870
30	"	Changsha, Hunan.	"	1,064
31	"	"	Kweiyang, Kweichow	1,630
32	"	Kweilin, Kwangsi,	"	1,020
33	"	"	Yunnanfu, Yunnan	2,150
34	"	Kweiyang, Kweichow	Chengtu, Szechuan	1,120
35	"	"	Yunnanfu, Yunnan	1,155
36	"	Sian, Shensi.	Lanchow, Kansu	1,030
37	"	Lanchow, Kansu,	Tsinghai	2,140
38	"	"	Sinkiang	4,410
39	"	Tsinghai	Tibet	710
40	"	Sian, Shensi.	Chengtu, Szechuan	1,220
41	"	Chengtu, Szechuan,	Changsha, Hunan	1,960
42	"	"	Lanchow, Kansu	1,580
43	"	"	Yunnanfu, Yunnan	1,510
44	"	"	Tibet	3,160
45	"	Sian, Shensi.	"	1,590
46	"	Tsinan, Shantung.	Taiyuan, Shansi	330
47	"	Taiyuan, Shansi.	Inner Mongolia	1,440
48	"	"	Sian, Shensi	1,070
49	"	Tsinan, Shantung.	Nanking, Kiangsu	1,230
50	"	Nanking, Kiangsu.	Hangchow, Chekiang	490
51	"	"	Anking, Anhwei	520

N.B.—Fifty-one highways aggregate a length of 92,469 *li*, or 30,823 miles.

Having outlined the national highways, the next question is the order in which they should be built. The solution lies in the decision of two points. Are we going to lay emphasis on the employment of disbanded troops in highway building or are we going to lay emphasis on highway building only without concerning ourselves about the disbanded soldiers? If the first course is to be followed, we should concentrate our efforts on road-building in those provinces wherein disbandment is going to take place; and if the second one is to be followed, it is apparent that we should build roads in accordance with the economic needs of the people. Of the two views, it seems that the second should carry more weight with us, because in the first place it is uncertain to what extent we shall be able to carry out the disbandment, and in the second place, it is again uncertain whether the disbanded soldiers will be good for labor; while the economic development of the country has become a most pressing need which should be attended to as soon as possible. Besides, once the construction begins it will create work for the masses whose undesirable elements will then be withdrawn from society.

In order to put the proposition on a feasible basis, it is suggested that the whole system of 93,000 odd *li*, or 31,000 miles, be completed in a period of ten years, thus making an average of 9,300 *li*, or 3,100 miles, a year which is by no means an extravagant program. A second suggestion, in this connection, is that the highways to be built each year should be distributed over the different parts of the country, so that no single place will be benefited to the disadvantage of the others. For this purpose, we may divide the whole area into three sections: The northern section to cover that part lying to the north of the Great Wall, extending from Shanhaikwan to Ili, the middle section from that part on the south of the Great Wall to the Yangtze River, and the southern section to include the entire territory south of the Yangtze. Thus in any one section only 3,100 *li*, or a little over a thousand miles of highway, will be built in a year. Coming down to details as to where the one thousand miles of highway in each section should be built, etc., the problem should be left to the National Highway Bureau to work out, as it is both impossible and futile for us to attempt the task.

AN ESTIMATE OF COST.

The budget for the above-mentioned scheme should be of two kinds—ordinary and extraordinary. The ordinary expenses are the constant items, and the extraordinary expenses, those items that do not recur ordinarily. Under the ordinary expenses come the following: Materials for construction, cost of labor, surveying and drafting, maintenance of offices, cost of mechanical construction and purchase of land. The extraordinary expenses are the initial expenses for the offices of administration, the equipment of surveying and drafting parties and of the labor corps. They may be tabulated as follows:—

1—ORDINARY BUDGET

1.—Purchase of material for 9,300 <i>li</i> . at \$3,000 per <i>li</i> , including the cost of transportation, said estimate being based on extensive and exhaustive investigations	\$2,790,000
2.—Cost of labor, consisting of digging and filling, levelling, surveying and making of side-paths. Based on the ability of five men to build in one day a length of ten feet and a width of fifty feet, a <i>li</i> of 1,800 feet in length and 50 feet in width can be finished in one day by 900 men, or in one month by thirty men. If there are 400 men in a labor corps, according to the above estimate, a length of thirteen <i>li</i> can be built in one month. If the extreme cold and hot months are deducted, counting the working months of the year at ten, and if in one month thirteen <i>li</i> can be built by one corps of 400 men, then 1,300 <i>li</i> can be built in ten months. To have 9,300 <i>li</i> completed in ten months will require the services of 72 such labor corps, or 28,699 laborers, with 400 men in a corps. According to the estimate made of \$324,000 to a corps, 72 labor corps will cost	3,818,800
3.—Ten surveying parties at \$1,500 each per month, or \$18,000 per year (for the present the number is fixed at ten)	180,000
4.—Maintenance of the National Highway Bureau at \$5,000 a month, or \$60,000 a year, and of six sub-bureaux at \$3,600 a month, or \$259,200	3,192,000
5.—Mechanical construction, such as bridges, drainages, tunnelling, etc.	1,000,000
6.—Purchase of land (a rough estimate)	1,000,000
7.—Initial expenses for offices before construction is started and when lands are purchased	100,000
Total of seven items	\$34,387,200

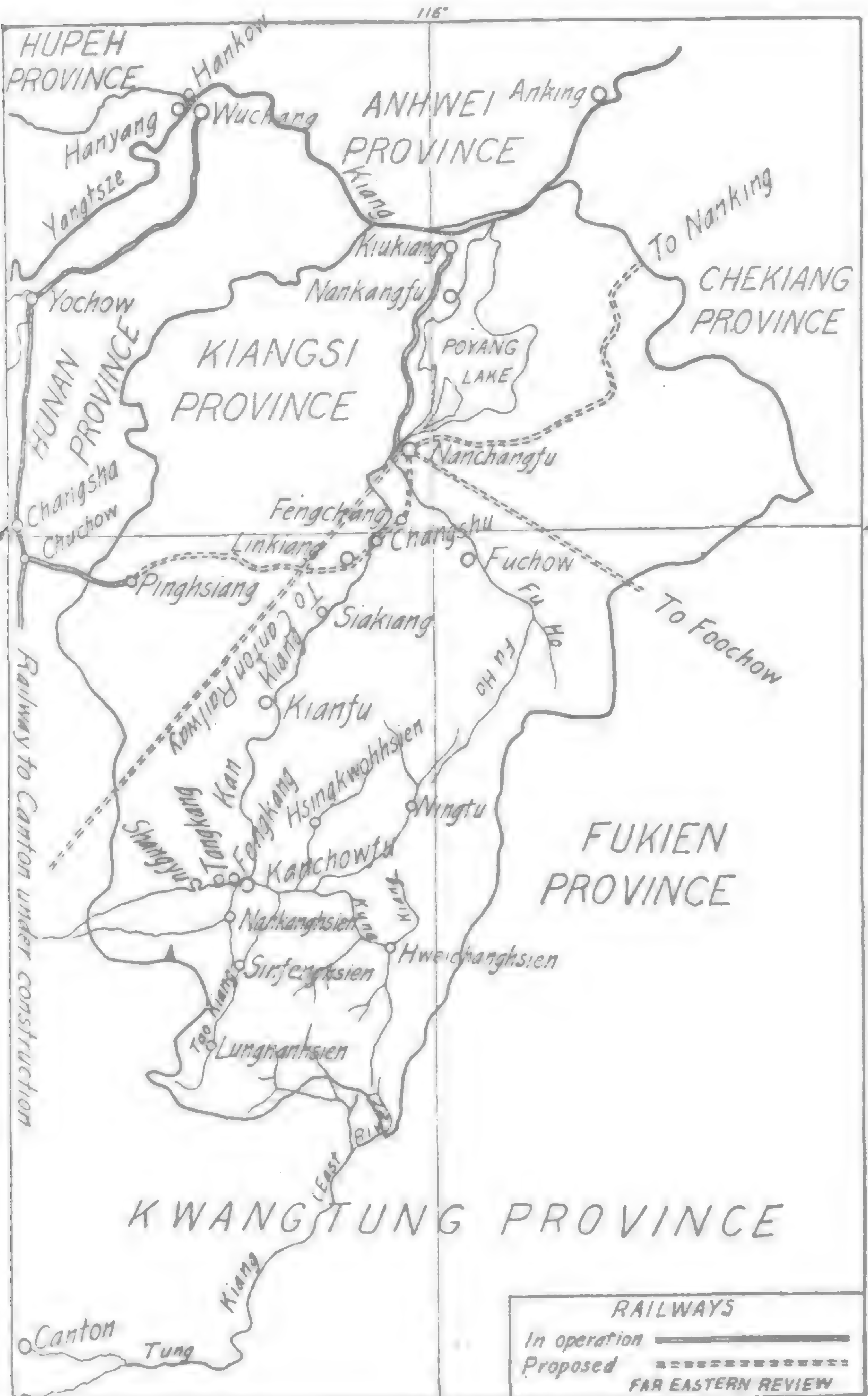
2—THE EXTRAORDINARY BUDGET.

1.—Initial expense for the National Highway Bureau, including furniture at \$2,000, and six sub-bureaux at \$1,500 each ...	\$11,000
2.—Equipment of ten surveying parties at \$4,000 each for instruments, etc., and \$1,000 each for furniture, etc., i.e., \$5,000 each ...	50,000
3.—Seventy-two labor corps and their working tools, large and small, at \$72,000 each ...	5,220,000
Total ...	\$5,281,000

For the first year, the budget will run up to \$39,668,200 in order to build 9,300 *li* of highway. The average cost per *li* is \$3,600, or \$10,900 per mile. The sum may appear excessive, but its results will be incalculable since the whole country will be opened up. Highway building is recommended not only as an economic investment, but also as a panacea to cure all of China's diseases, which are detrimental to the interests of mankind.

On the Kan River in Kiangsi Province

Trade fares by devious and difficult routes in China. There are waterways of great and small capacity, some wide and deep and smooth, others silted, or narrow, or beset with dangerous rapids. Of the latter the Kan River, of Kiangsi Province, is typical. It is the most important river in the province, and



through its valley a great commerce finds its way, sometimes on steam launches, more often on junks, and in some parts on rafts of bamboo.

The river rises in the south-east of the province and empties its waters in the Poyang Lake. In the flood season it is navigable for steam launches up to Nanchangfu, for junks of medium tonnage to Kanchowfu, and for small craft up to Nankanghsien. Merchandise and natural products also come through the valley on pack animals, along a route made famous by the fact that the embassies of Lord Macartney and Lord Amherst traversed it on their return from Peking to Canton in 1793 and in 1816 respectively. From these journeys it became known as the "Ambassadors' route." Of conditions on the river to-day we have the account of a journey made during August and September by a correspondent of the "North-China Daily News," who shows that on the Kan, as on every other river in China, there is crying need for conservancy work. But despite all natural and other difficulties commerce carries on and even increases in volume. From the correspondent's letters we take the following facts:

Steam launches were traveling as far as Kianfu, a distance of some 420 *li*, the journey usually taking about one day and one night. About fifteen powerful steam launches, drawing from three to five feet of water run on the Kan above Nanchang, these being operated by Chinese shipping companies, who apparently has no regard for timetables or passengers' feelings. Nor do they care how many tickets they sell for individual vessels, often one hundred being sold when there are but fifty seats, the result being that ticket holders crowd the vessels to the danger point and sit down where they can.

My friend and I purchased two tickets for a 48-hours' river journey and all the accommodation we had was an awkward seat on our own 50-lb. of baggage. We had to fight for this seat and during the remainder of the voyage we only retained the privilege of sitting by being born in a tenacious Scotch nation. The steamer we traveled by was the str. *Nanchang*.

Between the city of Nanchang and Changshu the river is wide and fairly deep and the country on either bank is planted out with rice. Fengcheng is well known as a rice producing centre. Leaving Nanchang after 8 a.m. we reached Changshu before 11 p.m.

More passengers crowded on to the steamer here and under cover of a blurred moon and pressure of a high wind we continued up the Kan. When morning broke we were nearing a wall city called Siakiang. The river at this point enters a series of narrow gorges beyond which there are a number of sand shallows, and about noon the *Nanchang* struck a sand bank and could go no further. We were still 60 odd *li* from Kian, our destination. The passengers were speedily transferred to a large sailing boat on which we passed one very uncomfortable night with 60 to 80 other passengers.

Two days later we returned down river on a smaller steamer named the *Pu-an*. This steamer drew slightly over three feet of water; it had very bad engines, dangerous boilers and covered about 10 knots an hour. Twenty *li* below Kian we passed the str. *Kangming*, firm, high and dry on a sand bank. Another 100 *li* down the river we passed our old steamer, the *Nanchang* stranded in a *cul de sac*. After saying good-bye to us she steamed down stream, took the wrong channel and came to grief.

A further 80 *li* down river brought us to another steamer stuck on a sand bank. This was the str. *Linkiang*, the fastest boat on the run. This steamer travels 40 *li* an hour and belongs to the same company as the *Nanchang*. When only 30 *li* from Changshu our own little str. *Pu-an* broke down and we spent the night at anchor. The "iron boss," the Chinese name for engineer, spent the night repairing the engine and next morning we continued our journey. Late that evening the *Pu-an* brought us safely into Nanchang.

As the water is not likely to rise very high this autumn, there is little or no hope of getting the three steamers off the sand banks this year. Financially this is a heavy loss to the companies as the three steamers could still be used for some months during the present season.

The captains on these inland steamers have practically no education or training. They are captains from experience, not from knowledge. However, some of them are very capable and experienced men, and on a river like the Kan, where navigation is difficult and dangerous and sometimes impossible, they show much patience and native ability. Several times the steamer *Pu-an* stuck fast on a sand bank, and we wondered if our fate would be the same as the other three steamers. The captain indulged in a piece of scientific wriggling and the *Pu-an* crossed the bar.

The engineer, may be a very simple country fellow whose grandfather impressed him very seriously with the fact that pressure on "this boiler" must on no account exceed 180. By keeping this point firmly in mind he continues to be engineer of the str. *Pu-an*. Many of the captains and engineers on the steamers plying on Chinese inland waters are lads from Shanghai and Ningpo.

Many of the owners are Cantonese. Despite the fact of frequent accidents, much money is made and on the last run by the *Pu-an* the company cleared over \$200. Away in these inland waters a life is enacted daily of which the outside world may know or hear very little. It is certainly quite a rest and change to be away for some little time at least from political intrigue and national strife. The only untoward question asked us during the whole journey was, "Where is all the fat pork going to, and who is buying up all the lard?" The buyers of pork fat have apparently invaded some of Kiangsi's inland towns and are very busy

exporting fat to Shanghai. I was unable to enlighten them nor could I tell what the fat was being used for. As long as good silver dollars come back, the merchants in Kiangsi are not averse to trading with the outside world.

Navigating the Kung River

Leaving Kanchow going East, we ascend the Kung River which has its rise in the borders of Fukien. It is navigable all the way to Hweichanghsien, and passes the cities of Yutu and Shuikin, and the important marts of Chuinmenling and Lotan. This river has no rapids, and is an artery of great trade. On the higher reaches where boats of any size cannot reach, the goods are sent down either by sampan or by small bamboo rafts to where the boats can load. Roughly this is called 600 *li* from Kanchow, but as the river winds terribly, I believe, it must be far more.

One of the tributaries of this river is the Taokiang, which joins it about 40 *li* east of Kanchow, after traveling some 400 *li* from the south where it has its rise in the hills on the borders of Kuangtung. This stream has one great drawback in that about 60 *li* from Kanchow there are about 20 or 30 *li* of fearful rapids, and every year there are a few wrecks there. Downstream boats have to get a pilot who takes charge of the helm. All boats carry a huge oar for special use here, and when coming through these rapids it is fastened on to the prow of the boat and all the crew stand by it. At a signal from the pilot down goes this oar and round she swings, at times taking almost a right-angle turn. These 20 odd *li* are quickly passed coming down, but upstream boats may take days on that same stretch. Having passed that, the river is always navigable for ordinary boats to Sinfenghsien, passing *en route* several important market towns, and in high spring water small boats can go on as far as Lungnanhsien, but the water is so shallow there that often the goods have to be sent downstream for some miles by sampan. From this it will be seen that it is impossible to bring wood rafts from Lungnan, on the borders of Kuangtung, as has been previously reported elsewhere.

On the north bank of the Kung we have the Hsingkwoh river which joins up 60 *li* from Kanchow. It rises in the hills separating Ningtu and Hsingkwohhsien, and travels about 200 *li* ere it reaches Kiangkow where it joins the Kung. By reason of the reckless cutting of trees without planting of the past 100 years, the hills are left bare, and consequently the sand has been washed down until now the bed of this river is about on a level with the adjoining fields, so that, when there comes a few hours' rain there is great damage done by flooding. Hsingkwoh city itself is flooded every time there is a few days' rain. I have been there at such times, and have seen the streets turned into small canals. Nevertheless there is a great volume of trade there.

Boats can only get there with certainty a few times a year, but they have a very good service of small bamboo rafts which meet the boats at Kiangkow. One man walking in the water pulls each raft, and can take 30 piculs of goods. Strings of these rafts may be seen winding their way upstream to Hsingkwoh, and on to Kaohsing market town, a great centre of the oil trade. This oil is extracted from the berries of the camelia tree, and resembles olive oil. It is used in this district without a rival for cooking. Hundreds of piculs are sent yearly from that district to Hweichang for transportation to Kuangtung. The boats on the return trip come loaded with salt, which from that district, for convenience of carrying, is put up in small baskets each weighing when full about 10 or 12 catties.

Passing on up the Kung the next tributary is the Ningtu river which gets its name from that city. It is navigable practically all the year round to Ningtu. Further on still there are other streams, but for trade purposes these are the most important ones.

Now taking the Chang River, which reaches Kanchow from the West and has its rise on the borders of Hunan near a place called Tiehba, from whence it has traveled about 200 *li* past several market towns *en route*, also the hsien city of Shangyu, and 60 *li* from Kanchow, the large mart of Tangkiang. This is a very large and very wealthy town, the centre of cloth and sugar manufacture, and the largest market town in the province. As many as six large boats are employed carrying rice and other commodities from Kanchow once every three days the year round. Further down the town of Fungkiang, also a prosperous place, adds its quota to the materials required for every market day from the city.

The tributaries of the Chang are many, but for business purposes only one need be named. That known as the Yungkiang takes its name from the ancient name of the hsien city now known as Nankang, situated on the west bank about 100 water *li* from Kanchow. This stream joins the Chang 35 *li* from the city after having traveled nearly 200 *li* from the south. (This stream and the Taokiang run parallel, as parallel as rivers will run with about an average of from 40 to 55 *li* between them). A trip up this river gives a good idea of the thriftiness of those of past generations, and how well they planned for those who now follow, in the matter of irrigation, and as that whole valley is a very great rice producing district, the water for the rice fields is of the utmost importance. To this end there were many weirs constructed across the river, with only a gap left through which the boats have to be hauled when going upstream. These have been made very many years ago, as there are now trees growing in many of them of a good old age. There are over 100 irrigation wheels on the river's edge. These are very costly to make, a very ordinary one costing about \$300. They are all made of bamboo except the hub which is of hard wood. Timber has a poor chance coming down this river. What does come is mostly what is called *tungtsai*, cut up in lengths of 7 or 8-ft. and used for coffins.

Criminal Code of the Republic of China

(Continued from page 633)

3. Offences relating to escape of prisoners, offences relating to concealment of offenders and suppression or destruction of evidence of crime, and offences relating to false evidence and false charge.
4. Offences against public safety.
5. Offences relating to false currency, offences relating to false weights and measures, and offences relating to false documents and seals.
6. Offences against public morality, and offences against the institutions of marriage and family.
7. Offences against religion.
8. Offences against trade.
9. Offences relating to opium, and offences relating to gambling and lotteries.
10. The offence of homicide, the offence of causing bodily harm, the offence of abortion, and the offence of abandonment.
11. Offences against personal liberty, offences against reputation and credit, and offences relating to personal secrets.
12. The offence of theft, offences of snatching, robbery, and piracy, the offence of misappropriation, offences of fraud and breach of confidence, the offence of extortion, the offence of receiving property obtained through the commission of an offence, and the offence of mischief.

Article 53. When after judgment has become final any person is found to have been guilty of recidive, the punishment shall be increased in accordance with the provisions of the last preceding Article.

The provisions of the preceding paragraph shall not apply where the offender is found to have been guilty of recidive after sentence has been executed or remitted.

Article 54. The provisions relating to recidive shall not apply where the offender was convicted of the prior offence under any law relating to the army or navy or by any tribunal in a foreign country.

CHAPTER IX.

CONCURRENCE OF OFFENCES.

Article 55. Several offences committed prior to pronouncement of judgment shall constitute concurrence of offences.

Article 56. In case of concurrence of offences a separate sentence shall be passed for each separate offence, and the execution of the several sentences shall be determined in the following manner:—

1. Where the heaviest sentence is death, no other sentences with the exception of accessory punishments shall be executed.
2. Where the heaviest sentence is imprisonment for life, no other sentences with the exception of fines and accessory punishments shall be executed.
3. Where several sentences of imprisonment for definite periods have been passed, the sentence to be executed shall be for a period which shall be fixed between a minimum of not less than the longest period of such several sentences and a maximum of not more than the sum total of the periods of such several sentences: Provided that in no case shall the sentence to be executed exceed twenty years.
4. Where several sentences of detention have been passed, the sentence to be executed shall be fixed *mutatis mutandis* in accordance with the rule under the last preceding number.
5. Where several fines have been imposed, the fine to be paid shall be for an amount which shall be fixed between a minimum of not less than the largest of such several fines and a maximum of not more than the sum total of such several fines.
6. Where several deprivations of civic rights for definite periods have been pronounced, only the deprivation of civic rights for the longest period shall be executed.

Where several forfeitures have been imposed, the forfeitures shall be executed cumulatively.

7. Where several sentences have been passed in accordance with Nos. 3 to 6, such sentences shall be executed cumulatively.

Article 57. In case of concurrence of offences when judgment has been pronounced in respect of some of the offences, judgment shall be pronounced only in respect of the offences on which no judgment has been pronounced.

Article 58. In case of concurrence of offences when two or more judgments have been pronounced, the provisions of Article 56 shall apply.

Article 59. In case of concurrence of offences when after judgment has been pronounced pardon has been granted in respect of any of the offences, judgment in respect of the offences remaining unpardoned shall be pronounced in accordance with the provisions of Article 56.

Article 60. When one and the same act constitutes several offences under different provisions or when the means employed in committing one offence or when the results of the commission of one offence constitute another offence under a different provision, only the heaviest of the prescribed punishments shall be inflicted.

Article 61. When several successive acts constitute offences of the same nature such successive acts shall be deemed to be one offence.

CHAPTER X.

JUDICIAL DISCRETION REGARDING PUNISHMENTS.

Article 62. Punishments shall be determined within the prescribed maximum and minimum after due consideration of all the circumstances of the case.

Special consideration shall be given to the following:—

1. The state of mind of the offender.
2. The cause of the offence.
3. The motive for the offence.
4. The provocation for the offence.
5. Any peculiar circumstance affecting the offender.
6. The mode of living of the offender.
7. The past conduct of the offender.
8. The intelligence of the offender.
9. The results of the offence.
10. The conduct of the offender after the commission of the offence.

In addition to the circumstances specified in the last preceding paragraph, the economic condition of the offender shall be given due consideration in determining the amount of fine.

Article 63. Punishments may be reduced by reason of extenuating circumstances.

Article 64. Punishments may be reduced in accordance with the provision of the last preceding Article, notwithstanding that increase or reduction of punishment may be prescribed by law.

CHAPTER XI.

INCREASE OR REDUCTION OF PUNISHMENTS.

Article 65. A death penalty may not be increased.

A death penalty reduced by one-third shall be imprisonment for life; a death penalty reduced by one-half shall be imprisonment for a period of not less than twelve years nor more than twenty years.

Article 66. Punishment of imprisonment for life may not be increased.

Punishment of imprisonment for life reduced by one-third shall be imprisonment for a period of not less than ten years nor more than fifteen years; punishment of imprisonment for life reduced by one-half shall be imprisonment for a period of not less than seven years nor more than twelve years.

Article 67. Increase or reduction of punishment of imprisonment for a definite period shall apply to both the prescribed maximum and minimum.

Article 68. Increase or reduction of punishment of detention shall apply to the prescribed maximum only.

Article 69. Increase or reduction of fine shall apply to the prescribed maximum only.

Article 70. When reduction of punishment is prescribed without specifying the degree of the reduction, the punishment shall be reduced by at least one-half.

Article 71. When two or more principal punishments have been prescribed, increase or reduction of punishment shall apply to the several punishments.

Article 72. When a punishment is to be both increased and reduced in the same degree, the increase and reduction shall annul each other.

When a punishment is to be both increased and reduced in different degrees, the increase shall precede the reduction.

Article 73. In case of two or more increases or reductions of punishments, the increases or reductions shall be successive.

In case of two or more reductions of punishments in different degrees, reduction in the lesser degree shall precede reduction in the greater degree.

Article 74. No fractional part of a day by reason of any increase or reduction of punishment of imprisonment for a definite period or of detention shall be reckoned.

The same rule shall apply to any fractional part of a yuan by reason of any increase or reduction of fine.

Article 75. Accessory punishments may not be increased or reduced.

CHAPTER XII.

SUSPENSION OF PUNISHMENT.

Article 76. Where any person is sentenced to imprisonment for a period of not more than two years, to detention, or to fine, suspension of punishment may at the same time be granted for a period of not less than three years nor more than five years from the day when judgment becomes final; Provided—

1. That the offender has not been previously sentenced to detention or to any heavier punishment; or
2. That within three years after execution or remission of a sentence of detention, or that within five years after execution or remission of a sentence of imprisonment for a period of not more than five years, the offender has not been sentenced for a fresh offence to detention or to any heavier punishment.

Article 77. Suspension of punishment may be revoked in any one of the following cases:—

1. Where during the period of suspension the offender has committed a fresh offence and has been sentenced to any punishment not lighter than detention.
2. Where during the period of suspension the offender has been sentenced for an offence committed before suspension to any punishment not lighter than detention.
3. Except as provided for in No. 2 of the last preceding Article, where during the period of suspension it is found that before suspension the offender committed an offence and was sentenced to any punishment not lighter than detention.

Article 78. Where suspension of punishment has not been revoked after the expiration of the period of suspension, the sentence shall become null and void.

CHAPTER XIII.

CONDITIONAL RELEASE.

Article 79. Whoever during the execution of a sentence of imprisonment proves himself to have reformed may, after having been imprisoned for a period of ten years in case of imprisonment for life or after having been imprisoned for one-half the required period in case of imprisonment for a definite period, be granted conditional release upon application by the prison authorities and subject to approval by the Ministry of Justice; Provided that in no case shall conditional release be granted to any person sentenced to imprisonment for a definite period who has not been imprisoned for less than two years.

The period for which the offender has to be in prison as provided for in the preceding paragraph shall be reckoned in the following manner:—

1. Where the sentence is imprisonment for life, the provision of Article 50 shall not apply.

2. Where the sentence is imprisonment for a definite period and where Article 50 applies, only the period remaining after reduction under Article 50 shall be taken into consideration.

Article 80. Conditional release may be revoked in any one of the following cases:—

1. Where during the period of conditional release the offender has been sentenced for a fresh offence to any punishment not lighter than detention.
2. Where during the period of conditional release the offender fails to comply with the rules of conditional release.

In case of revocation of conditional release the time which has elapsed during conditional release shall not be reckoned in the execution of the sentence.

Article 81. Where during the period of conditional release the offender has to suffer sentence for another offence, the period of execution of such sentence shall not be reckoned in the period of conditional release.

Article 82. Where conditional release has not been revoked after the expiration of the period of conditional release, the unexecuted portion of the sentence shall be deemed to have been executed.

CHAPTER XIV.

PREScription.

Article 83. The right of prosecution shall be barred by prescription if it is not exercised within the following periods:—

1. Twenty years, where the offence is punishable with death, or with imprisonment for life.
2. Fifteen years, where the offence is punishable with imprisonment for a period of not less than ten years.
3. Ten years, where the offence is punishable with imprisonment for a period of not less than five years and less than ten years.
4. Five years, where the offence is punishable with imprisonment for a period of not less than one year and less than five years.
5. One year, where the offence is punishable with imprisonment for a period of less than one year, or with detention, or with fine.

The periods specified in the preceding paragraph shall commence from the day when the offence was completed, or in the case of successive acts under Article 61, from the day of the last act.

Article 84. The period of prescription of the right of prosecution shall be determined in accordance with the maximum of the prescribed punishment, or where two or more principal punishments have been prescribed, in accordance with the maximum of the heaviest of the punishments.

Article 85. The period of prescription of the right of prosecution shall be determined in accordance with the prescribed punishment, notwithstanding that such punishment may be increased or reduced under the General Provisions of this Code.

Article 86. Prescription of the right of prosecution shall be interrupted during the time when proceedings for preliminary investigation, preliminary examination, prosecution, or trial shall have been instituted.

The proceedings specified in the preceding paragraph shall have the same effect in respect of all known and unknown participants in the commission of the offence.

In case of interruption of prescription, the period of prescription shall commence anew from the day when the proceedings specified in paragraph 1 shall have terminated; Provided that in any case prescription shall be deemed to be complete after the expiration of twice the original period.

Article 87. Prescription of the right of prosecution shall be suspended during the time when by law the proceedings specified in paragraph 1 of the last preceding Article cannot be instituted or continued.

In case of suspension of prescription, the period of prescription which has elapsed prior to suspension shall be added to the time which commences from the day when suspension terminated.

In case of offences for which prosecution may be instituted only on private complaint or request, prescription shall be deem-

ed to be complete when no complaint or request has been made within the prescribed period of prescription.

Article 88. The right of execution of sentence shall be barred by prescription if it is not exercised within the following periods:—

1. Thirty years, where the sentence is death, or imprisonment for life.
2. Twenty years, where the sentence is imprisonment for a period of not less than ten years.
3. Ten years, where the sentence is imprisonment for a period of not less than five years and less than ten years.
4. Five years, where the sentence is imprisonment for a period of not less than one year and less than five years.
5. Two years, where the sentence is imprisonment for a period of less than one year, detention, or fine, or forfeiture inflicted independently of any principal punishment.

The periods specified in the preceding paragraph shall commence from the day when judgment becomes final.

Article 89. Prescription of the right of execution of sentence shall be interrupted during the time when measures shall have been taken in execution.

In case of interruption of prescription, the period of prescription shall commence anew from the day when the measures specified in the preceding paragraph shall have terminated; Provided that in any case prescription shall be deemed to be complete after the expiration of twice the original period.

Article 90. Prescription of the right of execution of sentence shall be suspended during the time when by law measures may not be taken in execution.

In case of suspension of prescription the period of prescription which has elapsed prior to suspension shall be added to the time which commences from the day when suspension terminated.

Second Part.—Specific Offences and Punishments

CHAPTER I.

OFFENCES AGAINST THE PRESIDENT.

Article 91. Whoever commits the offence of intentional homicide against the President, shall be punished with death.

An attempt to commit an offence under this Article shall be punished with death.

Whoever makes any preparation to commit or conspires to commit an offence under this Article, shall be punished with imprisonment for a period of not less than one year nor more than seven years.

Article 92. Whoever commits against the President the offence of intentionally causing bodily harm, or any offence against personal liberty, or any offence against reputation, shall be liable to the punishment prescribed for the offence increased by one-third.

Article 93. Deprivation of civic rights may be inflicted for offences under this Chapter.

CHAPTER II.

OFFENCES AGAINST THE INTERNAL SECURITY OF THE STATE.

Article 94. Whoever attempts by unlawful means to effect any change in the constitution or to seize any part of the territory of the Republic is said to commit an offence against the internal security of the State, and shall be punished with imprisonment for a period of not less than seven years; ringleaders shall be punished with imprisonment for life.

Whoever makes any preparation to commit or conspires to commit an offence under this Article, shall be punished with imprisonment for a period of not less than six months nor more than five years.

Article 95. Whoever by acting riotously commits an offence against the internal security of the State, shall be punished with imprisonment for life, or with imprisonment for a period of not less than seven years; ringleaders shall be punished with death, or with imprisonment for life.

Whoever makes any preparation to commit or conspires to commit an offence under this Article, shall be punished with imprisonment for a period of not less than one year nor more than seven years.

Article 96. Whoever assists another to commit any of the offences specified in the two last preceding Articles by furnishing provisions or ammunition, or by any other acts whatsoever, shall be punished with imprisonment for a period of not less than one year nor more than seven years.

Article 97. Deprivation of civic rights may be inflicted for offences under this Chapter.

CHAPTER III.

OFFENCES AGAINST THE EXTERNAL SECURITY OF THE STATE.

Article 98. Whoever enters into communication with any foreign Government or with the agent of any foreign Government with intent that war may be declared against the Republic by such Government or by any other foreign Government, shall be punished with death, or with imprisonment for life.

An attempt to commit an offence under this Article shall be punishable.

Whoever makes any preparation to commit or conspires to commit an offence under this Article, shall be punished with imprisonment for a period of not less than one year nor more than seven years.

Article 99. Whoever enters into communication with any foreign Government or with the agent of any foreign Government with intent to subject any part of the territory of the Republic to the domination of such Government or of any other foreign Government, shall be punished with death, or with imprisonment for life, or with imprisonment for a period of not less than ten years.

An attempt to commit an offence under this Article shall be punishable.

Whoever makes any preparation to commit or conspires to commit an offence under this Article, shall be punished with imprisonment for a period of not less than one year nor more than seven years.

Article 100. Whoever being a citizen of the Republic serves with the army or navy of an enemy or bears arms for the enemy against the Republic or against an ally of the Republic, shall be punished with death, or with imprisonment for life.

An attempt to commit an offence under this Article shall be punishable.

Whoever makes any preparation to commit or conspires to commit an offence under this Article, shall be punished with imprisonment for a period of not less than one year nor more than seven years.

Article 101. Whoever during a state of war or when war is threatened renders aid of a military or naval nature to an enemy or injures the military or naval interests of the Republic or of an ally of the Republic, shall be punished with imprisonment for a period of not less than five years nor more than twelve years.

An attempt to commit an offence under this Article shall be punishable.

Whoever makes any preparation to commit or conspires to commit an offence under this Article, shall be punished with imprisonment for a period of not more than three years.

Article 102. Whoever commits the offence specified in paragraph 1 of the last preceding Article—

1. By delivering to the enemy or by destroying, damaging, or rendering useless any fortified place, naval base, military post any vessel in the service of the army or navy, or any place or structure of military or naval importance; any arms, ammunition, provisions, monies, or necessaries, provided that they are intended for use by the military or naval forces of the Republic; bridges, railways, electric apparatus or installations for communication, or any article used for transportation; or
2. By recruiting for the enemy or by inducing any person in the military or naval forces of the Republic to surrender to the enemy; or

3. By inciting any person in the military or naval forces of the Republic to omit the execution of any duty or to commit any breach of discipline or to desert or to mutiny; or

4. By disclosing or delivering to the enemy any secret document, plan, information, or other article of a secret nature, concerning any fortified place, naval base, military post, any vessel in the service of the army or navy, or any place or structure of military or naval importance, or concerning any military or naval movement; or

5. By committing acts of espionage for the enemy or by rendering aid to any enemy spy;

shall be punished with death, or with imprisonment for life.

An attempt to commit an offence under this Article shall be punishable.

Whoever makes any preparation to commit or conspires to commit an offence under this Article, shall be punished with imprisonment for a period of not less than one year nor more than seven years.

Article 103. Whoever during a state of war or when war is threatened delivers to the enemy any arms, ammunition, or any article which may be directly used for military or naval purposes, provided that they are not intended for use by the military or naval forces of the Republic, shall be punished with imprisonment for life, or with imprisonment for a period of not less than five years.

An attempt to commit an offence under this Article shall be punishable.

Whoever makes any preparation to commit or conspires to commit an offence under this Article, shall be punished with imprisonment for a period of not more than three years.

Article 104. Whoever during a state of war or when war is threatened fails to deliver any military or naval supplies which he has undertaken by contract to deliver or delivers supplies not in conformity with the terms of the contract, shall be punished with imprisonment for a period of not more than five years, or with both imprisonment for the same period and fine of not more than five thousand yuan.

Whoever commits by negligence the offence specified in this Article, shall be punished with imprisonment for a period of not more than two years, or with detention, or with fine of not more than one thousand yuan.

Article 105. Whoever discloses or delivers to another any document, plan, information, or other article which the interests or defence of the Republic require to be kept secret, shall be punished with imprisonment for a period of not more than five years.

Whoever discloses or delivers to any foreign Government or to the agent of any foreign Government the document, plan, information, or article specified in the preceding paragraph, shall be punished with imprisonment for a period of not less than three years nor more than ten years.

An attempt to commit an offence under this Article shall be punishable.

Whoever makes any preparation to commit or conspires to commit an offence under this Article, shall be punished with imprisonment for a period of not more than one year.

Article 106. Whoever being a public officer discloses or delivers to another by negligence the document, plan, information, or article specified in paragraph 1 of the last preceding Article, of which document, plan, information, or article he has knowledge or possession by reason of his official functions, shall be punished with imprisonment for a period of not more than two years, or with detention, or with fine of not more than one thousand yuan.

Article 107. Whoever obtains or collects the document, plan, information, or article specified in paragraph 1 of Article 105, shall be punished with imprisonment for a period of not more than five years.

An attempt to commit an offence under this Article shall be punishable.

Whoever makes any preparation to commit or conspires to commit an offence under this Article, shall be punished with imprisonment for a period of not more than one year.

Article 108. Whoever without authority obtains entrance to or remains in any fortress, fortification, vessel of war, or any place or structure of military or naval importance with intent to obtain or collect the document, plan, information, or article

specified in paragraph 1 of Article 105, shall be punished with imprisonment for a period of not more than one year.

Article 109. Whoever being entrusted by the Government with the duty of conducting any affair with a foreign Government betrays his trust to the detriment of the Republic, shall be punished with imprisonment for life, or with imprisonment for a period of not less than seven years.

Article 110. Whoever alters, forges, suppresses, abandons, damages, or destroys any document, plan, or other article which is evidence of any right of the Republic against a foreign State, shall be punished with imprisonment for a period of not less than five years nor more than twelve years.

Article 111. Deprivation of civic rights may be inflicted for offences under this Chapter.

CHAPTER IV.

OFFENCES AGAINST FRIENDLY RELATIONS WITH FOREIGN STATES.

Article 112. Whoever commits the offence of intentional homicide against the Chief Executive of a friendly State, shall be punished with death.

An attempt to commit an offence under this Article shall be punishable.

Whoever makes any preparation to commit or conspires to commit an offence under this Article, shall be punished with imprisonment for a period of not less than one year nor more than seven years.

Article 113. Whoever commits against the Chief Executive of a friendly State the offence of intentionally causing bodily harm, or any offence against personal liberty, or any offence against reputation, shall be liable to the punishment prescribed for the offence increased by one-third.

Article 114. Whoever commits an offence against the representative of a friendly State accredited to the Republic, shall be punished *mutatis mutandis* in accordance with the provisions relating to offences against the lawful discharge of public functions.

Article 115. Whoever without authority commits any hostile act against a foreign State, shall be punished with imprisonment for a period of not less than three years nor more than ten years.

An attempt to commit an offence under this Article shall be punishable.

Whoever makes any preparation to commit or conspires to commit an offence under this Article, shall be punished with imprisonment for a period of not more than one year.

Article 116. Whoever during a state of war between foreign States violates any rule of neutrality enacted by the Government shall be punished with imprisonment for a period of not more than one year, or with detention, or with fine of not more than three thousand yuan, or with both imprisonment for the same period and fine of the same amount, or with both detention and fine of the same amount.

Article 117. Whoever with intent to offer any insult in respect of a foreign State publicly pulls down, dishonours, damages, or destroys the flag or other national emblem of such foreign State, shall be punished with imprisonment for a period of not more than one year, or with detention, or with fine of not more than three hundred yuan.

Article 118. Prosecution for the offence against reputation specified in Article 113 or for the offence specified in Article 117 may be instituted only at the request of the Government of the foreign State concerned.

CHAPTER V.

MALFEASANCE IN OFFICE.

Article 119. Whoever being a public officer demands, accepts, or agrees to accept any bribe or other undue benefit in respect of an official act, shall be punished with imprisonment for a period of not more than five years, or with both imprisonment for the same period and fine of not more than five thousand yuan.

Whoever promises, offers, or gives to any public officer any bribe or other undue benefit in respect of an official act, shall be punished with imprisonment for a period of not more than two years, or with both imprisonment for the same period and fine of not more than three thousand yuan.

The bribe received through the commission of an offence under this Article shall be forfeited; where forfeiture of the whole or a portion of the bribe is impossible, the amount of the bribe remaining unforfeited shall be levied on the offender.

Article 120. Whoever being a public officer demands, accepts, or agrees to accept any bribe or other undue benefit in respect of an official act which would constitute a breach of official duty, shall be punished with imprisonment for a period of not less than one year nor more than seven years, or with both imprisonment for the same period and fine of not more than five thousand yuan.

If in consideration of such bribe or undue benefit the public officer does the official act which constitutes a breach of his official duty, he shall be punished with imprisonment for a period of not less than three years nor more than ten years, or with both imprisonment for the same period and fine of not more than five thousand yuan.

Whoever promises, offers, or gives to any public officer any bribe or other undue benefit in respect of an official act which would constitute a breach of official duty, shall be punished with imprisonment for a period of not more than three years, or with both imprisonment for the same period and fine of not more than three thousand yuan.

The bribe received through the commission of an offence under this Article shall be forfeited; where forfeiture of the whole or a portion of the bribe is impossible, the amount of the bribe remaining unforfeited shall be levied on the offender.

Article 121. Whoever being a public officer vested with judicial functions or being an arbitrator demands, accepts, or agrees to accept any bribe or other undue benefit in respect of any legal matter submitted for his consideration or decision, shall be punished with imprisonment for a period of not less than three years nor more than ten years, or with both imprisonment for the same period and fine of not more than five thousand yuan.

Whoever promises, offers, or gives to any public officer vested with judicial functions or to any arbitrator any bribe or other undue benefit in respect of any legal matter submitted to such public officer or arbitrator for consideration or decision, shall be punished with imprisonment for a period of not more than three years, or with both imprisonment for the same period and fine of not more than three thousand yuan.

The bribe received through the commission of an offence under this Article shall be forfeited; where forfeiture of the whole or a portion of the bribe is impossible, the amount of the bribe remaining unforfeited shall be levied on the offender.

Article 122. Whoever expecting to be a public officer demands, accepts, or agrees to accept any bribe or other undue benefit in respect of an official act and after receiving official appointment exercises his functions in consideration of such bribe or undue benefit, shall be liable to the punishment prescribed for a public officer who demands, accepts, or agrees to accept any bribe or other undue benefit.

Article 123. Whoever being a public officer vested with judicial functions or being an arbitrator knowingly diverts the law, shall be punished with imprisonment for a period of not less than six months nor more than five years.

Article 124. Whoever being a public officer charged with the duty of bringing offenders to justice—

1. Employs threats or commits violence in order to extort confession; or
2. Knowingly causes an innocent person to be brought before the law or to be punished, or knowingly omits to cause a guilty person to be brought before the law or to be punished;

shall be punished with imprisonment for a period of not less than one year nor more than seven years.

If the commission of the offence results in death or in grievous bodily harm, the offender shall be punished in accordance with the provisions relating to the offence of intentionally causing bodily harm resulting in death or in grievous bodily harm.

Article 125. Whoever being a public officer charged with the duty of co-operating in the execution of punishments unlawfully executes any punishment, shall be punished with imprisonment for a period of not more than five years.

Whoever being a prison warder charged with the duty of executing punishments unlawfully omits to execute any punishment, shall be punished with imprisonment for a period of not more than three years.

Whoever being a prison warder charged with the duty of executing punishments causes by negligence the unlawful execution of any punishment, shall be punished with imprisonment for a period of not more than one year, or with detention, or with fine of not more than three hundred yuan.

Article 126. Whoever being a public officer collects taxes, duties, or any sum of money which he knows to be not due or to be in excess of what is due, shall be punished with imprisonment for a period of not more than three years, or with detention, or with fine of not more than one thousand yuan, or with both imprisonment for the same period and fine of the same amount, or with both detention and fine of the same amount.

Whoever being a public officer retains in whole or in part any monies or articles which he knows it to be his official duty to pay or deliver, shall be liable to the same punishment.

An attempt to commit an offence under this Article shall be punishable.

Article 127. Whoever being a public officer directly or indirectly takes a pecuniary interest in any matter the management or superintendence of which is entrusted to him in his official capacity, shall be punished with imprisonment for a period of not less than three years, or with both imprisonment for the same period and fine of not more than five thousand yuan.

Article 128. Whoever being a public officer employed in any post-office breaks open or suppresses any mailed matter, shall be punished with imprisonment for a period of not more than three years, or with detention, or with fine of not more than five hundred yuan, or with both imprisonment for the same period and fine of the same amount, or with both detention and fine of the same amount.

Article 129. Whoever being a public officer employed in any telegraph office breaks open or suppresses any telegraphic message, shall be punished with imprisonment for a period of not more than three years, or with detention, or with fine of not more than five hundred yuan, or with both imprisonment for the same period and fine of the same amount, or with both detention and fine of the same amount.

Article 130. Whoever being a public officer incites his subordinate officer to commit any of the offences specified in Articles 119 to 129, shall be liable to the punishment prescribed for the offence reduced by one-half.

Article 131. Whoever being a public officer by taking advantage of any authority, opportunity, or means afforded him by his official functions commits any offence not provided for in this Chapter, shall be liable to the punishment prescribed for the offence increased by one-third; Provided that this shall not apply where a punishment is specifically prescribed for the case of a public officer committing an offence.

Article 132.—Deprivation of civic rights may be inflicted for offences under this Chapter.

CHAPTER VI.

OFFENCES AGAINST THE LAWFUL DISCHARGE OF PUBLIC FUNCTIONS.

Article 133. Whoever during the time that any public officer or any person called to his assistance is engaged in the lawful discharge of public functions employs threats or commits violence against such public officer or person, shall be punished with imprisonment for a period of not more than three years.

Whoever employs threats or commits violence with intent to compel any public officer or any person called to his assistance to do an act pertaining to his public functions, or with intent to obstruct the lawful discharge of such public functions, or with intent to cause such public officer to resign, shall be liable to the same punishment.

If the commission of any of the offences specified in the two preceding paragraphs results in death or in grievous bodily harm to the public officer or to the person called to his assistance, the offender shall be punished in accordance with the provisions relating to the offence of intentionally causing bodily harm resulting in death or in grievous bodily harm.

Article 134. If any of the offences specified in the last preceding Article is committed in public and in concert by an assembly of three or more persons, every person taking part in such assembly shall be punished with imprisonment for a period of not more than one year; ringleaders and persons who have employed threats or committed violence shall be punished with

imprisonment for a period of not less than one year nor more than seven years.

If the commission of the offence results in death or in grievous bodily harm to public officer or to the person called to his assistance, ringleaders and persons who have employed threats or committed violence shall be punished in accordance with the provisions relating to the offence of intentionally causing bodily harm resulting in death or in grievous bodily harm.

Article 135. Whoever suppresses, damages, renders useless, abandons, or destroys any document, plan, or other article which has been taken into official custody by any public officer or which has been officially entrusted to any third party for custody, shall be punished with imprisonment for a period of not less than six months nor more than five years.

Article 136. Whoever removes, soils or dishonours, damages, destroys, or otherwise renders ineffectual any official seal affixed by a public officer or any official mark indicative of attachment, shall be punished with imprisonment for a period of not more than one year, or with detention, or with fine of not more than three hundred yuan.

Article 137. Whoever in the presence of any public officer and during the lawful discharge of his public functions offers any insult to him, or publicly offers any insult in respect of the lawful discharge of his public functions, shall be punished with imprisonment for a period of not more than six months, or with detention, or with fine of not more than three hundred yuan.

Whoever publicly offers any insult in respect of any public office shall be liable to the same punishment.

Article 138. Whoever with intent to offer an insult to any public officer or in respect of any public office pulls down, soils or dishonours, damages, or destroys any official notice posted in a public place, shall be punished with detention, or with fine of not more than one hundred yuan.

Article 139. Deprivation of civic rights may be inflicted for offences under this Chapter.

CHAPTER VII.

OFFENCES RELATING TO ELECTIONS.

Article 140. Whoever by threats or violence or by other unlawful means interferes with another in the exercise of his right to vote at any national or local election authorized by law, shall be punished with imprisonment for a period of not more than five years.

An attempt to commit an offence under this Article shall be punishable.

Article 141. Whoever being a qualified voter demands, accepts, or agrees to accept any bribe or other undue benefit in consideration of his refraining from exercising the right to vote or of exercising it in a particular manner, shall be punished with imprisonment for a period of not more than three years, or with both imprisonment for the same period and fine of not more than five thousand yuan.

Whoever promises, offers, or gives to any qualified voter any bribe or other undue benefit in consideration of such voter refraining from exercising the right to vote or exercising it in a particular manner, shall be punished with imprisonment for a period of not more than two years, or with both imprisonment for the same period and fine of not more than three thousand yuan.

The bribe received through the commission of an offence under this Article shall be forfeited; where forfeiture of the whole or a portion of the bribe is impossible, the amount of the bribe remaining unforfeited shall be levied on the offender.

Article 142. Whoever by offering any economic advantage or disadvantage induces any qualified voter to refrain from exercising the right to vote or to exercise it in a particular manner, shall be punished with imprisonment for a period of not more than three years.

Article 143. Whoever by fraudulent or other unlawful means obtains an incorrect result of the voting or alters the election returns, shall be punished with imprisonment for period of not more than three years.

An attempt to commit an offence under this Article shall be punishable.

Article 144. Whoever interferes with any election or causes a disturbance at any election, shall be punished with imprison-

ment for a period of not more than one year, or with detention, or with fine of not more than five hundred yuan.

Article 145. Whoever endeavours to learn the name of any person for whom votes have been cast at any election by ballot shall be punished with imprisonment for a period of not more than six months, or with detention, or with fine of not more than three hundred yuan.

Article 146. Deprivation of civic rights may be inflicted for offences under this Chapter.

CHAPTER VIII.

OFFENCES AGAINST PUBLIC ORDER.

Article 147. When three or more persons publicly assemble with intent to employ threats or commit violence, every person taking part in such assembly after the third order to disperse has been given by any competent public officer shall be punished with imprisonment for a period of not more than six months, or with detention, or with fine of not more than three hundred yuan; ringleaders shall be punished with imprisonment for a period of not more than three years.

Article 148. When three or more persons publicly assemble and employ threats or commit violence, every person taking part in such assembly shall be punished with imprisonment for a period of not more than one year, or with detention, or with fine of not more than three hundred yuan; ringleaders and persons who have employed threats or committed violence shall be punished with imprisonment for a period of not less than six months nor more than five years.

Article 149. Whoever disturbs the public peace by threatening to commit violence against life, person, or property, shall be punished with imprisonment for a period of not more than two years.

Article 150. Whoever by means of written or spoken words, drawings or pictures, or by any other means—

1. Publicly incites another to commit an offence; or
2. Publicly incites another to transgress the law, or to disobey any lawful order; or
3. Publicly lauds an offence committed by another, thereby disturbing the public peace;

shall be punished with imprisonment for a period of not more than two years, or with detention, or with fine of not more than one thousand yuan.

Article 151. Whoever is a member of a gang the object of which is to commit offences, shall be punished with imprisonment for a period of not more than one year, or with detention, or with fine of not more than three hundred yuan; ringleaders shall be punished with imprisonment for a period of not less than six months nor more than five years.

Article 152. Whoever knowing that an offence against the internal security of the State, or an offence against the external security of the State, or an offence relating to false currency, or an offence of rape, of homicide, of robbery, or of piracy is about to be committed fails to report the same to any competent public officer or to the person threatened, when by giving such information the commission of the offence could have been prevented, shall be punished with imprisonment for a period of not more than one year, or with detention, or with fine of not more than three hundred yuan.

Article 153. Whoever incites any person in the military or naval forces of the Republic to omit the execution of any duty or to commit any breach of discipline or to desert or to mutiny, shall be punished with imprisonment for a period of not less than six months nor more than five years.

Article 154. Whoever without authority raises, equips, or commands an armed force, shall be punished with imprisonment for a period of not more than three years.

Whoever enlists in such armed force, shall be punished with imprisonment for a period of not more than one year, or with detention, or with fine of not more than three hundred yuan.

Article 155. Whoever without authority exercises the functions of any public officer of the Republic or of a foreign State, shall be punished with imprisonment for a period of not more than one year, or with detention, or with fine of not more than three hundred yuan.

Article 156. Whoever without authority publicly wears the uniform of any public officer of the Republic or any decoration of the Republic or uses the title of any public officer of the Republic, shall be punished with imprisonment for a period of not more than six months, or with detention, or with fine of not more than three hundred yuan.

Article 157. Whoever with intent to offer any insult in respect of the Republic publicly pulls down, dishonours, damages, or destroys the flag or other national emblem of the Republic, shall be punished with imprisonment for a period of not more than one year, or with detention, or with fine of not more than three hundred yuan.

Article 158. Whoever for the purpose of gain fraudulently causes another to leave the territory of the Republic, shall be punished with imprisonment for a period of not more than two years, or with both imprisonment for the same period and fine of not more than one thousand yuan.

Article 159. When any person fails to report that an offence enumerated in Article 152 is about to be committed by any of his relatives, the punishment shall be remitted.

Article 160. Deprivation of civic rights may be inflicted for offences under this Chapter.

CHAPTER IX.

ESCAPE OF PRISONERS.

Article 161. Whoever being in lawful custody escapes from such custody, shall be punished with imprisonment for a period of not more than one year.

If the offence specified in the preceding paragraph is committed by threats or violence, or by damaging any part of the jail or any instrument by which the person is held in lawful custody, the punishment shall be imprisonment for a period of not more than five years.

When three or more persons assemble and commit by threats or violence the offence specified in paragraph 1, every person taking part in such assembly shall be punished with imprisonment for a period of not less than five years nor more than twelve years; ringleaders and persons who have employed threats or committed violence shall be punished with imprisonment for life, or with imprisonment for a period of not less than five years.

An attempt to commit an offence under this Article shall be punishable.

Article 162. Whoever rescues any person held in lawful custody from such custody or facilitates the escape of such person from lawful custody, shall be punished with imprisonment for a period of not more than three years.

If the offence specified in the preceding paragraph is committed by threats or violence, or by damaging any part of the jail or any instrument by which the person is held in lawful custody, the punishment shall be imprisonment for a period of not less than six months nor more than five years.

When three or more persons assemble and commit by threats or violence the offence specified in paragraph 1, every person taking part in such assembly shall be punished with imprisonment for a period of not less than seven years; ringleaders and persons who have employed threats or committed violence shall be punished with imprisonment for life, or with imprisonment for a period of not less than seven years.

An attempt to commit an offence under this Article shall be punishable.

Article 163. Whoever being a public officer or being called to the assistance of any public officer and having in his official capacity the lawful custody of any person allows such person to escape or facilitates his escape from lawful custody, shall be punished with imprisonment for a period of not less than one year nor more than seven years.

If the offence specified in the preceding paragraph is committed by negligence, the punishment shall be imprisonment for a period of not more than one year, or detention, or fine of not more than five hundred yuan.

An attempt to commit an offence under paragraph 1, shall be punishable.

Article 164. Deprivation of civic rights may be inflicted for offences under this Chapter.

CHAPTER X.

CONCEALMENT OF OFFENDERS AND SUPPRESSION OR DESTRUCTION OF EVIDENCE OF CRIME.

Article 165. Whoever harbors or assists in the concealment of any offender or of any person who has escaped from lawful custody, shall be punished with imprisonment for a period of not more than two years.

Whoever with intent to commit the offence specified in the preceding paragraph personates the offender or the person who has escaped from lawful custody, shall be liable to the same punishment.

Article 166. Whoever alters, forges, or destroys any evidence in a criminal case in which another is implicated or whoever produces such altered or forged evidence, shall be punished with imprisonment for a period of not more than two years.

Article 167. If before judgment has become final in a criminal case in which another is implicated the offender confesses to having committed the offence specified in the last preceding Article, the punishment shall be reduced or remitted.

Article 168. If any relative of the offender or of the person who has escaped from lawful custody commits for the benefit of such offender or person any of the offences specified in this Chapter, the punishment shall be remitted.

Article 169. Deprivation of civic rights may be inflicted for offences under this Chapter.

CHAPTER XI.

FALSE EVIDENCE AND FALSE CHARGE.

Article 170. Whoever being a witness, expert, or interpreter at a trial in any public office vested with judicial functions makes either before or after a signed affirmation any statement which is false in any point material to the case, shall be punished with imprisonment for a period of not less than one year nor more than seven years.

Article 171. Whoever with intent to implicate another in any criminal or disciplinary proceedings lays before any competent public officer any false complaint or information, shall be punished with imprisonment for a period of not more than five years.

Whoever with intent to implicate another in any criminal or disciplinary proceedings alters or forges any evidence or produces any altered or forged evidence, shall be liable to the same punishment.

Article 172. Whoever commits against any of his lineal ascendants the offence specified in the last preceding Article, shall be liable to the punishment prescribed for the offence increased by one-half.

Whoever commits against any of his collateral ascendants the offence specified in the last preceding Article, shall be liable to the punishment prescribed for the offence increased by one-third.

Article 173. Whoever without specifying the alleged offender lays before any competent public officer any false complaint or information regarding the commission of an offence, shall be punished with imprisonment for a period of not more than one year, or with detention, or with fine of not more than three hundred yuan.

Whoever without specifying the alleged offender alters or forges any evidence of crime thereby causing the institution of proceedings for preliminary investigation, shall be liable to the same punishment.

Article 174. If the offender commits the offence specified in Article 170 in order to protect his liberty or reputation or the liberty or reputation of any of his relatives, the punishment shall be remitted.

Article 175. If the offender who has committed any of the offences specified in Articles 170 to 173 makes confession before a judgment or disciplinary order has become final in the proceedings in which false evidence was given or in which a false complaint or information was laid, the punishment shall be reduced or remitted.

Article 176. In addition to the infliction of punishment the court may upon application by the injured party order the judgment to be published in whole or in part, at the expense of the convicted person.

Article 177. Deprivation of civic rights may be inflicted for offences under this Chapter.

CHAPTER XII.

OFFENCES AGAINST PUBLIC SAFETY.

Article 178. Whoever sets fire to any occupied dwelling-place or to any structure, railway car, electric car, vessel, or mine, in which there are persons, shall be punished with imprisonment for life, or with imprisonment for a period of not less than seven years.

Whoever by negligence sets fire to anything specified in the preceding paragraph, shall be punished with imprisonment for a period of not more than one year, or with detention, or with fine of not more than three hundred yuan.

An attempt to commit an offence under paragraph 1 shall be punishable.

Whoever makes any preparation to commit an offence under paragraph 1, shall be punished with imprisonment for a period of not more than one year, or with detention, or with fine of not more than three hundred yuan; Provided that the punishment may be remitted according to the nature and circumstances of the case.

Article 179. Whoever sets fire to any unoccupied dwelling-place which belongs to another or sets fire to any structure, railway car, electric car, vessel, or mine, which belongs to another and in which there are no persons, shall be punished with imprisonment for a period of not less than three years nor more than ten years.

Whoever endangers the public safety by setting fire to anything specified in the preceding paragraph, if such thing belongs to himself, shall be punished with imprisonment for a period of not less than six months nor more than five years.

Whoever by negligence sets fire to anything specified in paragraph 1, shall be punished with imprisonment for a period of not more than six months, or with detention, or with fine of not more than three hundred yuan; whoever by negligence sets fire to anything specified in the last preceding paragraph, thereby endangering the public safety, shall be liable to the same punishment.

An attempt to commit an offence under paragraph 1 shall be punishable.

Whoever makes any preparation to commit an offence under paragraph 1, shall be punished with imprisonment for a period of not more than one year, or with detention, or with fine of not more than three hundred yuan; Provided that the punishment may be remitted according to the nature and circumstances of the case.

Article 180. Whoever endangers the public safety by setting fire to anything not specified in the two last preceding Articles, if such thing belongs to another, shall be punished with imprisonment for a period of not less than one year nor more than seven years.

Whoever endangers the public safety by setting fire to anything not specified in the two last preceding Articles, if such thing belongs to himself, shall be punished with imprisonment for a period of not more than two years.

Whoever by negligence sets fire to anything not specified in the two last preceding Articles, thereby endangering the public safety, shall be punished with detention, or with fine of not more than three hundred yuan.

Article 181. Whoever intentionally or by negligence causes destruction by means of gunpowder, steam, electricity, gas, or any explosive substance, shall be punished *mutatis mutandis* in accordance with the provisions relating to fire caused intentionally or by negligence.

Article 182. Whoever endangers the public safety by causing to escape or by obstructing the flow of any steam, electricity, or gas, shall be punished with imprisonment for a period of not more than three years, or with detention, or with fine of not more than three hundred yuan.

If the commission of the offence results in death or in grievous bodily harm, the offender shall be punished in accordance with the provisions relating to the offence of intentionally causing bodily harm resulting in death or in grievous bodily harm.

Article 183. Whoever causes the flooding of any occupied dwelling-place or of any structure, railway car, electric car, or

mine, in which there are persons, shall be punished with imprisonment for life, or with imprisonment for a period of not less than five years.

Whoever by negligence causes the flooding of anything specified in the preceding paragraph, shall be punished with imprisonment for a period of not more than one year, or with detention, or with fine of not more than three hundred yuan.

An attempt to commit an offence under paragraph 1 shall be punishable.

Article 184. Whoever causes the flooding of any unoccupied dwelling-place which belongs to another or causes the flooding of any structure, railway car, electric car, or mine, which belongs to another and in which there are no persons, shall be punished with imprisonment for a period of not less than one year nor more than seven years.

Whoever endangers the public safety by causing the flooding of anything specified in the preceding paragraph, if such thing belongs to himself, shall be punished with imprisonment for a period of not less than six months nor more than five years.

Whoever by negligence causes the flooding of anything specified in paragraph 1, shall be punished with imprisonment for a period of not more than six months, or with detention, or with fine of not more than three hundred yuan; whoever by negligence causes the flooding of anything specified in the last preceding paragraph, thereby endangering the public safety, shall be liable to the same punishment.

An attempt to commit an offence under paragraph 1 shall be punishable.

Article 185. Whoever endangers the public safety by causing the flooding of anything not specified in the two last preceding Articles, if such thing belongs to another, shall be punished with imprisonment for a period of not more than five years.

Whoever endangers the public safety by causing the flooding of anything not specified in the two last preceding Articles, if such thing belongs to himself, shall be punished with imprisonment for a period of not more than two years.

Whoever by negligence causes the flooding of anything not specified in the two last preceding Articles, thereby endangering the public safety, shall be punished with detention, or with fine of not more than three hundred yuan.

Article 186. Whoever endangers the public safety by breaking or destroying any dyke, lock or sluice, or any reservoir, shall be punished with imprisonment for a period of not more than three years.

If the offence specified in the preceding paragraph is committed by negligence, the punishment shall be detention, or fine of not more than three hundred yuan.

An attempt to commit an offence under paragraph 1 shall be punishable.

Article 187. Whoever during the time of a fire or of a flood conceals, damages, or destroys any apparatus intended for protection against fire or flood or otherwise interferes with the work of protecting from fire or flood, shall be punished with imprisonment for a period of not more than three years, or with detention, or with fine of not more than three hundred yuan.

Article 188. Whoever damages, upsets, or destroys any railway car, electric car, or vessel, in which there are persons, shall be punished with imprisonment for life, or with imprisonment for a period of not less than five years.

If the commission of the offence results in death, the offender shall be punished with death, or with imprisonment for life; if the commission of the offence results in grievous bodily harm, the offender shall be punished with imprisonment for life, or with imprisonment for a period of not less than seven years.

If the offence specified in paragraph 1 is committed by negligence, the punishment shall be imprisonment for a period of not more than one year, or detention, or fine of not more than three hundred yuan.

Whoever in the performance of his occupation commits the offence specified in paragraph 1 by neglecting the degree of care required by his occupation, shall be punished with imprisonment for a period of not more than two years, or with detention, or with fine of not more than five hundred yuan.

An attempt to commit an offence under paragraph 1 shall be punishable.

Article 189. Whoever damages or destroys any steam or electric railway, steam or electric railway signal, lighthouse, or

buoy, or otherwise endangers the passage of any railway car, electric car, or vessel, shall be punished with imprisonment for a period of not less than three years nor more than ten years.

If the commission of the offence results in causing damage to or in the upsetting or destruction of any railway car, electric car, or vessel, the offender shall be punished in accordance with the provisions of the last preceding Article.

If the offence specified in paragraph 1 is committed by negligence, the punishment shall be imprisonment for a period of not more than six months, or detention, or fine of not more than three hundred yuan.

Whoever in the performance of his occupation commits the offence specified in paragraph 1 by neglecting the degree of care required by his occupation, shall be punished with imprisonment for a period of not more than one year, or with detention, or with fine of not more than five hundred yuan.

An attempt to commit an offence under paragraph 1 shall be punishable.

Article 190. Whoever endangers the safety of public traffic by obstructing, damaging, or destroying any road, waterway, bridge, or anything intended for public traffic, shall be punished with imprisonment for a period of not more than three years, or with detention, or with fine of not more than three hundred yuan.

If the commission of the offence results in death or in grievous bodily harm, the offender shall be punished in accordance with the provisions relating to the offence of intentionally causing bodily harm resulting in death or in grievous bodily harm.

An attempt to commit an offence under paragraph 1 shall be punishable.

Article 191. Whoever manufactures, imports, or is found in possession of any explosive substance, any gun-cotton, gunpowder, or other substance of a similar nature with intent that the same may be put to a criminal use, shall be punished with imprisonment for a period of not less than six months nor more than five years.

An attempt to commit an offence under this Article shall be punishable.

Article 192. Whoever without authority manufactures, imports, or is found in possession of anything specified in the last preceding Article, shall be punished with imprisonment for a period of not more than three years, or with detention, or with fine of not more than five hundred yuan.

An attempt to commit an offence under this Article shall be punishable.

Article 193. Whoever obstructs the working of the railway, the postal, the telegraph, or the telephone service, or obstructs the supply to the public of water, electricity, or gas, shall be punished with imprisonment for a period of not more than five years, or with detention, or with fine of not more than five hundred yuan.

Article 194. Whoever endangers the safety of another by damaging or destroying anything intended for the protection of human life in any mine, factory, or similar establishment, shall be punished with imprisonment for a period of not less than one year nor more than seven years.

If the offence specified in the preceding paragraph is committed by negligence, the punishment shall be imprisonment for a period of not more than six months, or detention, or fine of not more than three hundred yuan.

Whoever in the performance of his occupation commits the offence specified in paragraph 1 by neglecting the degree of care required by his occupation, shall be punished with imprisonment for a period of not more than one year, or with detention, or with fine of not more than five hundred yuan.

An attempt to commit an offence under paragraph 1 shall be punishable.

Article 195. Whoever places any poisonous or harmful substance in any aqueduct, well, reservoir, or any source of water supply, provided that the same is intended to be used by the public for drinking purposes, shall be punished with imprisonment for a period of not less than one year nor more than seven years.

If the commission of the offence results in death or in grievous bodily harm, the offender shall be punished in accordance with the provisions relating to the offence of intentionally causing bodily harm resulting in death or in grievous bodily harm.

If the offence specified in paragraph 1 is committed by negligence, the punishment shall be imprisonment for a period of not more than six months, or detention, or fine of not more than three hundred yuan.

An attempt to commit an offence under paragraph 1 shall be punishable.

Article 196. Whoever manufactures, sells, or exposes for sale any article injurious to the public health, shall be punished with imprisonment for a period of not more than six months, or with detention, or with fine of not more than one thousand yuan, or with both imprisonment for the same period and fine of the same amount, or with both detention and fine of the same amount.

Article 197. Whoever violates any law or order concerning quarantine, inspection, supervision, or entry into port, which law or order is promulgated for the prevention of epidemics among human beings, shall be punished with imprisonment for a period of not more than two years, or with detention, or with fine of not more than one thousand yuan.

Article 198. Whoever violates any law or order concerning quarantine, inspection, supervision, or entry into port, which law or order is promulgated for the prevention of epidemics among animals or plants, shall be punished with imprisonment for a period of not more than one year, or with detention, or with fine of not more than five hundred yuan.

Article 199. Whoever being a contractor for the erection of any structure or being an overseer endangers the public safety by violating recognized rules of construction in the erection or demolition of any structure, shall be punished with imprisonment for a period of not more than two years, or with detention, or with fine of not more than three thousand yuan.

Article 200. Whoever being engaged in the railway, the postal, the telegraph, or the telephone service, or in any service for the supply to the public of water, electricity, or gas takes part in a strike in connection with such service, shall be punished with imprisonment for a period of not more than one year, or with detention, or with fine of not more than three hundred yuan; ringleaders shall be punished with imprisonment for a period of not more than three years.

Article 201. Whoever during a time of public calamity endangers the public safety by failing to deliver any provisions or other necessities which he has undertaken by contract to deliver to any public officer or by delivering articles not in conformity with the terms of the contract, shall be punished with imprisonment for a period of not less than six months nor more than five years, or with both imprisonment for the same period and fine of not more than three thousand yuan.

Article 202. Anything belonging to one's self which is under attachment or which is charged with a right *in rem* or which is under lease or which is subject to a policy of insurance, shall be deemed to be a thing belonging to another within the meaning of this Chapter.

Article 203. Deprivation of civic rights may be inflicted for offences under this Chapter.

CHAPTER XIII.

OFFENCES RELATING TO FALSE CURRENCY.

Article 204. Whoever counterfeits or fraudulently alters any current coin, paper money, or bank-note with intent that the same may be put into circulation as standard currency, shall be punished with imprisonment for life, or with imprisonment for a period of not less than five years, or with both imprisonment for life and fine of not more than three thousand yuan, or with both imprisonment for a period of not less than five years and fine of not more than three thousand yuan.

Whoever collects any counterfeit or fraudulently altered current coins, paper money, or bank-notes with intent that the same may be put into circulation as standard currency, shall be liable to the same punishment.

An attempt to commit an offence under this Article shall be punishable.

Article 205. Whoever puts into circulation as standard currency any counterfeit or fraudulently altered current coin, paper money, or bank-note or delivers to another any counterfeit or fraudulently altered current coin, paper money, or bank-note with intent that the same may be put into circulation as standard

currency, shall be punished with imprisonment for life, or with imprisonment for a period of not less than five years, or with both imprisonment for life and fine of not more than three thousand yuan, or with both imprisonment for a period of not less than five years and fine of not more than three thousand yuan.

Whoever not knowing any current coin, paper money, or bank-note to have been counterfeited or fraudulently altered until after he has obtained possession of the same puts such coin, paper money, or bank-note into circulation as standard currency or delivers to another such coin, paper money, or bank-note with intent that the same may be put into circulation as standard currency, shall be punished with imprisonment for a period of not more than six months, or with detention, or with fine of not more than one thousand yuan.

An attempt to commit an offence under paragraph 1 shall be punishable.

Article 206. Whoever reduces the weight of any current coin with intent that the same may be put into circulation as standard currency, shall be punished with imprisonment for a period of not more than five years, or with both imprisonment for the same period and fine of not more than one thousand yuan.

Whoever collects any current coins of reduced weight with intent that the same may be put into circulation as standard currency, shall be liable to the same punishment.

An attempt to commit an offence under this Article shall be punishable.

Article 207. Whoever puts into circulation as standard currency any current coin of reduced weight or delivers such coin to another with intent that the same may be put into circulation as standard currency, shall be punished with imprisonment for a period of not more than five years, or with both imprisonment for the same period and fine of not more than one thousand yuan.

Whoever not knowing any current coin to be of reduced weight until after he has obtained possession of the same puts such coin into circulation as standard currency or delivers such coin to another with intent that the same may be put into circulation as standard currency, shall be punished with fine of not more than one thousand yuan.

An attempt to commit an offence under paragraph 1 shall be punishable.

Article 208. Whoever manufactures, delivers, or receives any instruments or material with intent that the same may be used for the purpose of counterfeiting or of fraudulently altering any current coin, paper money, or bank-note, or for the purpose of reducing the weight of any current coin, shall be punished with imprisonment for a period of not more than five years, or with both imprisonment for the same period and fine of not more than one thousand yuan.

Article 209. Whoever commits any of the offences specified in this Chapter in respect of foreign current coins, paper money, or bank-notes circulating in the Republic, shall be liable to the punishment prescribed for the offence reduced by one-third.

Whoever commits any of the offences specified in this Chapter in respect of foreign current coins, paper money, or bank-notes not circulating in the Republic, shall be liable to the punishment prescribed for the offence reduced by one-half.

Article 210. Any counterfeit or fraudulently altered current coins, paper money, bank-notes and the instruments and material specified in Article 208 shall be forfeited whether they do or do not belong to the offender.

Article 211. Deprivation of civic rights may be inflicted for offences under this Chapter.

CHAPTER XIV.

OFFENCES RELATING TO FALSE WEIGHTS AND MEASURES.

Article 212. Whoever makes any weights or measures which are not in conformity with the legal standard or alters any weights or measures which are in conformity with the legal standard, with intent that the same may be used as standard weights or measures, shall be punished with imprisonment for a period of not more than one year, or with detention, or with fine of not more than three hundred yuan, or with both imprisonment for the same period and fine of the same amount, or with both detention and fine of the same amount.

An attempt to commit an offence under this Article shall be punishable.

Article 213. Whoever sells any weights or measures which are not in conformity with the legal standard, with intent that the same may be used as standard weights or measures, shall be punished with imprisonment for a period of not more than one year, or with detention, or with fine of not more than three hundred yuan, or with both imprisonment for the same period and fine of the same amount, or with both detention and fine of the same amount.

An attempt to commit an offence under this Article shall be punishable.

Article 214. Whoever uses as standard weights or measures any weights or measures which are not in conformity with the legal standard, shall be punished with imprisonment for a period of not more than two years, or with detention, or with fine of not more than one thousand yuan, or with both imprisonment for the same period and fine of the same amount, or with both detention and fine of the same amount.

An attempt to commit an offence under this Article shall be punishable.

Article 215. Whoever is found in possession of any weights or measures which are not in conformity with the legal standard, with intent that the same may be used as standard weights or measures, shall be punished with fine of not more than one hundred yuan.

Article 216. The weights and measures specified in the last preceding Article shall be forfeited whether they do or do not belong to the offender.

Article 217. Deprivation of civic rights may be inflicted for offences under this Chapter.

CHAPTER XV.

OFFENCES RELATING TO FALSE DOCUMENTS AND SEALS.

Article 218. Whoever in a manner likely to cause injury to the public or to any person counterfeits or fraudulently alters any document, shall be punished with imprisonment for a period of not more than five years.

Article 219. Whoever in a manner likely to cause injury to the public or to any person counterfeits or fraudulently alters any public document, shall be punished with imprisonment for a period of not less than one year nor more than seven years.

Article 220. Whoever counterfeits or fraudulently alters any public bond, company share certificate, or other valuable security with intent that the same may be put into circulation as genuine, shall be punished with imprisonment for a period of not less than three years nor more than ten years, or with both imprisonment for the same period and fine of not more than three thousand yuan.

Whoever collects counterfeit or fraudulently altered public bonds, company share certificates, or other valuable securities with intent that the same may be put into circulation as genuine, shall be liable to the same punishment.

Article 221. Whoever counterfeits or fraudulently alters any postage or Government revenue stamp with intent that the same may be used as genuine, shall be punished with imprisonment for a period of not less than six months nor more than five years, or with both imprisonment for the same period and fine of not more than one thousand yuan.

Whoever collects counterfeit or fraudulently altered postage or Government revenue stamps with intent that the same may be used as genuine, shall be liable to the same punishment.

Whoever removes the cancellation mark on any genuine postage or Government revenue stamp with intent that such postage or Government revenue stamp may be used as if it had not been cancelled, shall be deemed to have counterfeited the same.

Article 222. Whoever counterfeits or fraudulently alters any ticket issued for the purpose of the transportation of any passenger on any vessel, steam or electric railway, or any other ticket of a similar nature, with intent that the same may be used as genuine, shall be punished with imprisonment for a period of not more than three years, or with detention, or with fine of not more than one thousand yuan.

Article 223. Whoever in a manner likely to cause injury to the public or to any person counterfeits or fraudulently alters any passport, permit, license, or any letter of introduction or

certificate concerning the character, capacity, service, or other qualifications of any person, shall be punished with imprisonment for a period of not more than one year, or with detention, or with fine of not more than three hundred yuan.

Article 224. A public officer who in a manner likely to cause injury to the public or to any person makes in any public document the preparation of which is within his official functions a false entry which he knows to be false, shall be punished with imprisonment for a period of not less than one year nor more than seven years.

Article 225. Whoever in a manner likely to cause injury to the public or to any person causes a false entry which he knows to be false to be made by any public officer in any public document the preparation of which is within the official functions of such public officer, shall be punished with imprisonment for a period of not more than three years.

Article 226. A medical practitioner who in a manner likely to cause injury to the public or to any person makes a false entry which he knows to be false in any certificate concerning the health or the cause of death of any person which certificate has to be produced in any public office or to any insurance company, shall be punished with imprisonment for a period of not more than three years, or with detention, or with fine of not more than five hundred yuan.

Article 227. Whoever uses as genuine any of the documents specified in Articles 218 to 226 shall be punished in accordance with the provisions relating to counterfeiting or fraudulently altering such document, or to the making of a false entry or to the causing of a false entry to be made.

Whoever uses as genuine any genuine postage or Government revenue stamp which has been cancelled, shall be deemed to have used as genuine a counterfeit postage or Government revenue stamp.

An attempt to commit an offence under this Article shall be punishable.

Article 228. Whoever in a manner likely to cause injury to the public or to any person counterfeits any seal, or the impression of any seal, or any signature, shall be punished with imprisonment for a period of not more than three years.

Whoever in a manner likely to cause injury to the public or to any person uses without authority any seal, or the impression of any seal, or any signature, shall be liable to the same punishment.

An attempt to commit an offence under this Article shall be punishable.

Article 229. Whoever counterfeits any public seal, or the impression of any public seal, shall be punished with imprisonment for a period of not less than six months nor more than five years.

Whoever in a manner likely to cause injury to the public or to any person uses without authority any public seal, or the impression of any public seal, shall be liable to the same punishment.

An attempt to commit an offence under this Article shall be punishable.

Article 230. Whoever manufactures, delivers, or receives any instruments or material with intent that the same may be used for the purpose of counterfeiting or of fraudulently altering any valuable security, or any postage or Government revenue stamp, shall be punished with imprisonment for a period of not more than two years, or with both imprisonment for the same period and fine of not more than five hundred yuan.

Article 231. Any counterfeit or fraudulently altered valuable security, postage or Government revenue stamp, counterfeit seal, the counterfeit impression of any seal, counterfeit signature, and the instruments and material specified in the last preceding Article, shall be forfeited whether they do or do not belong to the offender.

Article 232. Any writing or mark on any paper or on any article which by general usage or by special agreement is intended as evidence of the matter therein contained, shall be deemed to be a document within the meaning of this Chapter.

Article 233. Deprivation of civic rights may be inflicted for offences under this Chapter.

CHAPTER XVI.

OFFENCES AGAINST PUBLIC MORALITY.

Article 234. Whoever by threats or violence, by administering drugs, by inducing hypnosis, or by any other means rendering resistance impossible has carnal knowledge of a female person out of wedlock, is said to commit rape, and shall be punished with imprisonment for a period of not less than seven years.

Whoever has carnal knowledge of a female person who has not completed the twelfth year of her age, shall be deemed to have committed rape.

If any of the offences specified in the two preceding paragraphs is committed successively by two or more persons acting in concert, every such person shall be punished with imprisonment for life, or with imprisonment for a period of not less than seven years.

If the commission of rape results in death to the person violated, the offender shall be punished with death, or with imprisonment for life; if the commission of rape results in grievous bodily harm to the person violated, the offender shall be punished with imprisonment for life.

If the person violated commits suicide or causes grievous bodily harm to herself by attempting suicide through resentment at having suffered dishonour from the commission of rape, the offender shall be punished in accordance with the provisions of the last preceding paragraph.

Whoever after having committed rape commits the offence of intentional homicide against the person violated, shall be punished with death.

An attempt to commit any of the offences under paragraphs 1 and 2 shall be punishable.

Article 235. Whoever by threats or violence, by administering drugs, by inducing hypnosis, or by any other means rendering resistance impossible does an indecent act against any person, whether male or female, shall be punished with imprisonment for a period of not more than five years.

Whoever does an indecent act against any person, whether male or female, who has not completed the twelfth year of his or her age, shall be liable to the same punishment.

Article 236. Whoever taking advantage of the unconsciousness of a female person or of any other circumstance of a similar nature rendering resistance impossible has carnal knowledge of such female person out of wedlock, shall be punished with imprisonment for a period of not less than three years nor more than ten years.

Whoever taking advantage of the unconsciousness of any person, whether male or female, or of any other circumstance of a similar nature rendering resistance impossible does an indecent act against such person, shall be punished with imprisonment for a period of not more than three years.

If the commission of any of the offences specified in the two preceding paragraphs results in death to the person assaulted, the offender shall be punished with death, or with imprisonment for life, or with imprisonment for a period of not less than ten years; if the commission of any of the offences specified in the two preceding paragraphs results in grievous bodily harm to the person assaulted, the offender shall be punished with imprisonment for life, or with imprisonment for a period of not less than seven years.

If the person violated commits suicide or causes grievous bodily harm to herself by attempting suicide through resentment at having suffered dishonour from the commission of the offence specified in paragraph 1, the offender shall be punished in accordance with the provisions of the last preceding paragraph.

An attempt to commit an offence under paragraph 1 shall be punishable.

Article 237. If any of the offences specified in the three last preceding Articles is committed—

1. By any lineal or collateral ascendant against his descendant;
2. By any guardian or curator against the person under guardianship or curatorship;
3. By any teacher or master, against his pupil or apprentice who has not completed the twentieth year of his age;

4. By any officer in any public or private hospital, poor-house, or charitable institution against any person in charge of such hospital, poor-house, or charitable institution;

the offender shall be liable to the punishment prescribed for the offence increased by one-third.

Article 238. Whoever has carnal knowledge of any female person by fraudulently creating a misunderstanding on her part whereby she is induced to believe that the carnal knowledge is between husband and wife, shall be punished with imprisonment for a period of not less than six months nor more than five years.

An attempt to commit an offence under this Article shall be punishable.

Article 239. Carnal knowledge between relatives on the paternal side within the fourth degree, shall be punished with imprisonment for a period of not less than one year nor more than seven years.

Article 240. Whoever for the purpose of gain incites any female person of respectable character to submit to carnal knowledge by a third party or to do an indecent act with a third party, shall be punished with imprisonment for a period of not more than one year, or with both imprisonment for the same period and fine of not more than five hundred yuan.

Article 241. If the offence specified in the last preceding Article is committed by a husband against his wife or by one person against another in any of the circumstances specified in Article 237, the punishment shall be imprisonment for a period of not more than five years, or both imprisonment for the same period and fine of not more than one thousand yuan.

Article 242. Whoever makes it a profession to commit the offence specified in Article 240, shall be punished with imprisonment for a period of not more than three years, or with both imprisonment for the same period and fine of not more than one thousand yuan.

Article 243. Whoever incites any person, whether male or female, who has not completed the twelfth year of his or her age, to submit to carnal knowledge or to do an indecent act, shall be punished with imprisonment for a period of not more than two years.

Article 244. Whoever has carnal knowledge of any unmarried female person or of any widow, of respectable character, who has not completed the twentieth year of her age, shall be punished with imprisonment for a period of not more than six months, or with detention, or with fine of not more than three hundred yuan; the other guilty party shall be liable to the same punishment.

Article 245. Whoever publicly does an indecent act, shall be punished with detention, or with fine of not more than one hundred yuan.

Article 246. Whoever distributes, sells, or publicly exposes any indecent writing, drawing or picture, or other article, shall be punished with detention, or with fine of not more than five hundred yuan, or with both detention and fine of the same amount.

Whoever with intent to sell makes or is found in possession of the writing, drawing or picture, or article, as specified in the preceding paragraph, shall be liable to the same punishment.

Article 247. Prosecution for any of the offences specified in Articles 234 to 239, and in Article 244 may be instituted only on private complaint.

In the case of the offence specified in Article 244, if the injured party marries the offender no private complaint may be made until after a judgment declaring the marriage void or annulling the marriage has become final.

Article 248. Deprivation of civic rights may be inflicted for offences under this Chapter.

CHAPTER XVII.

OFFENCES AGAINST THE INSTITUTIONS OF MARRIAGE AND FAMILY.

Article 249. Whoever contracts a marriage during the lifetime of his or her spouse or contracts a marriage with two or more persons at one and the same time, shall be punished with imprisonment for a period of not more than five years; the other party who has contracted such marriage shall be liable to the same punishment.

Article 250. Whoever by fraudulent means contracts a void or voidable marriage which is therefor declared void or is annulled by a final judgment, shall be punished with imprisonment for a period of not more than three years.

Article 251. Whoever being a female person does an adulterous act during the life-time of her husband, shall be punished with imprisonment for a period of not more than two years; the other guilty party shall be liable to the same punishment.

Article 252. Whoever being a female person whose marriage has been dissolved or annulled contracts a marriage during the period within which re-marriage is prohibited by law, shall be punished with imprisonment for a period of not more than six months, or with detention, or with fine of not more than three hundred yuan.

Article 253. Whoever takes away any person, with or without his or her consent, who has not completed the twentieth year of his or her age, from the person having parental authority, or from his or her guardian or curator, shall be punished with imprisonment for a period of not less than six months nor more than five years.

Whoever for the purpose of gain or for the purpose of causing the person who has been taken away to submit to carnal knowledge or to do an indecent act commits the offence specified in the preceding paragraph, shall be punished with imprisonment for a period of not less than one year nor more than seven years, or with both imprisonment for the same period and fine of not more than one thousand yuan.

Whoever causes the person who has been taken away to be transported beyond the territorial limits of the Republic, shall be punished with imprisonment for a period of not less than seven years.

An attempt to commit an offence under this Article shall be punishable.

Article 254. Whoever with intent to render assistance to another who has committed the offence specified in the last preceding Article receives or harbours the person who has been taken away or causes such person to be concealed, shall be punished with imprisonment for a period of not less than six months nor more than five years.

Whoever for the purpose of gain or for the purpose of causing the person who has been taken away to submit to carnal knowledge or to do an indecent act receives or harbors such person or causes such person to be concealed, shall be punished with imprisonment for a period of not less than one year nor more than seven years, or with both imprisonment for the same period and fine of not more than five hundred yuan.

An attempt to commit an offence under this Article shall be punishable.

Article 255. Prosecution for any of the offences specified in Articles 250 and 251 may be instituted only on private complaint.

In the case of the offence specified in Article 251, no private complaint may be made when the husband has connived at the offence.

Article 256. Deprivation of civic rights may be inflicted for offences under this Chapter.

CHAPTER XVIII.

OFFENCES AGAINST RELIGION.

Article 257. Whoever publicly offers any insult in respect of any shrine, temple, convent, grave or tomb, or any place of worship, shall be punished with imprisonment for a period of not more than six months, or with detention, or with fine of not more than three hundred yuan.

Whoever interferes with any funeral, burial ceremony, religious service or rites, shall be liable to the same punishment.

Article 258. Whoever mutilates, abandons, defiles, offers any insult in respect of, or takes away without authority any dead body, shall be punished with imprisonment for a period of not less than one year nor more than seven years.

Whoever damages, abandons, or takes away without authority the bones or hair of any deceased person, or the cremated remains of any deceased person, or anything buried with any deceased person, shall be punished with imprisonment for a period of not less than six months nor more than five years.

An attempt to commit an offence under this Article shall be punishable.

Article 259. Whoever breaks open any grave or tomb, shall be punished with imprisonment for a period of not less than six months nor more than five years.

An attempt to commit an offence under this Article shall be punishable.

Article 260. Whoever breaks open any grave or tomb and mutilates, abandons, defiles, offers any insult in respect of, or takes away without authority the dead body, shall be punished with imprisonment for a period of not less than five years nor more than twelve years.

Whoever breaks open any grave or tomb and damages, abandons, or takes away without authority the bones or hair of the deceased person, or the cremated remains of the deceased person, or anything buried with the deceased person, shall be punished with imprisonment for a period of not less than three years nor more than ten years.

Article 261. Whoever commits against any of his lineal ascendants any of the offences specified in Articles 258 and 259 shall be liable to the punishment prescribed for the offence increased by one-half; whoever commits against any of his lineal ascendants the offence specified in Article 260 shall be punished with imprisonment for life, or with imprisonment for a period of not less than seven years.

Whoever commits against any of his collateral ascendants any of the offences specified in Articles 258 to 260 shall be liable to the punishment prescribed for the offence increased by one-third.

Article 262. Deprivation of civic rights may be inflicted for offences under this Chapter.

CHAPTER XIX.

OFFENCES AGAINST TRADE.

Article 263. Whoever by threats or violence—

1. Obstructs the sale or transportation of grain or other things necessary for the sustenance of the public, so as to cause a deficiency on the market; or
2. Obstructs the sale or transportation of seeds, fertilizers, raw materials, or other essentials for agricultural or industrial purposes, so as to cause a deficiency on the market;

shall be punished with imprisonment for a period of not more than five years, or with detention, or with fine of not more than three thousand yuan.

An attempt to commit an offence under this Article shall be punishable.

Article 264. Whoever with intent to obtain an increase or a reduction of wages or any other change in the conditions of work previously agreed upon compels another by threats or violence to suspend work or prevents another from resuming work, shall be punished with imprisonment for a period of not more than three years.

An attempt to commit an offence under this Article shall be punishable.

Article 265. Whoever counterfeits any trade mark, or any firm name used as a trade mark, with intent that such counterfeit trade mark or firm name may be used as genuine, shall be punished with imprisonment for a period of not more than two years, or with both imprisonment for the same period and fine of not more than three thousand yuan.

Article 266. Whoever in a manner likely to deceive the public imitates the trade mark of another or the firm name used by another as a trade mark, with intent that such imitated trade mark or firm name may be used as genuine, shall be punished with imprisonment for a period of not more than one year, or with detention, or with fine of not more than one thousand yuan, or with both imprisonment for the same period and fine of the same amount, or with both detention and fine of the same amount.

Article 267. Whoever imports, sells, or exposes for sale any article which he knows to bear a counterfeit or imitated trade mark or firm name used as a trade mark, shall be punished with imprisonment for a period of not more than six months, or with detention, or with fine of not more than one thousand yuan, or

with both imprisonment for the same period and fine of the same amount, or with both detention and fine of the same amount.

Article 268. Deprivation of civic rights may be inflicted for offences under this Chapter.

CHAPTER XX.

OFFENCES RELATING TO OPIUM.

Article 269. Whoever manufactures, sells, imports or exports opium, morphine, cocaine, heroine, or any of their derivatives, or is found in possession of the same with intent to sell, shall be punished with imprisonment for a period of not more than five years, or with both imprisonment for the same period and fine of not more than five thousand yuan.

An attempt to commit an offence under this Article shall be punishable.

Article 270. Whoever manufactures, sells, imports or exports any article exclusively intended for use in opium-smoking, or is found in possession of the same with intent to sell, shall be punished with imprisonment for a period of not more than three years.

An attempt to commit an offence under this Article shall be punishable.

Article 271. Whoever for the purpose of gain supplies to another any place of opium-smoking, shall be punished with imprisonment for a period of not less than six months nor more than five years, or with both imprisonment for the same period and fine of not more than five hundred yuan.

An attempt to commit an offence under this Article shall be punishable.

Article 272. Whoever cultivates the poppy plant or cocaine leaf with intent that the same may be used for the manufacture of opium, morphine, or cocaine, shall be punished with imprisonment for a period of not more than three years, or with both imprisonment for the same period and fine of not more than three thousand yuan.

Whoever sells any poppy or cocaine seeds with intent that the same may be used for the manufacture of opium, morphine, or cocaine, shall be punished with imprisonment for a period of not more than one year, or with detention, or with fine of not more than three thousand yuan, or with both imprisonment for the same period and fine of the same amount, or with both detention and fine of the same amount.

An attempt to commit an offence under this Article shall be punishable.

Article 273. Whoever smokes opium, gives to himself an injection of morphine, or makes use of cocaine, heroine, or any derivative of the same, shall be punished with imprisonment for a period of not more than six months, or with detention, or with fine of not more than one thousand yuan.

An attempt to commit an offence under this Article shall be punishable.

Article 274. Whoever gives another an injection of morphine, shall be punished with imprisonment for a period of not more than two years, or with both imprisonment for the same period and fine of not more than five hundred yuan.

An attempt to commit an offence under this Article shall be punishable.

Article 275. Whoever is found in possession of opium, morphine, cocaine, heroine, or any of their derivatives, or any article exclusively intended for use in opium-smoking, with intent that the same may be used for the commission of any of the offences specified in this Chapter, shall be punished with detention, or with fine of not more than three hundred yuan.

The opium, morphine, cocaine, heroine, their derivatives, and the articles exclusively intended for use in opium-smoking, as specified in the preceding paragraph, shall be forfeited whether they do or do not belong to the offender.

CHAPTER XXI.

OFFENCES RELATING TO GAMBLING AND LOTTERIES.

Article 276. Whoever in a public place or in any other place to which the public may obtain admittance stakes money or other article of value in a game of chance, shall be punished with

detention, or with fine of not more than one thousand yuan; Provided that the use of food or drink as a stake shall not constitute an offence under this Article.

Any article intended for gambling purposes which is then and there found to have been used in gambling and any money or other article of value in the bank or on the gaming-table shall be forfeited whether they do or do not belong to the offender.

Article 277. Whoever makes gambling a profession, shall be punished with imprisonment for a period of not more than two years, or with both imprisonment for the same period and fine of not more than one thousand yuan.

Article 278. Whoever for the purpose of gain supplies any place for gambling or assembles persons to gamble, shall be punished with imprisonment for a period of not more than three years, or with both imprisonment for the same period and fine of not more than three thousand yuan.

Article 279. Whoever issues lottery tickets without authority from the Government, shall be punished with imprisonment for a period of not more than one year, or with detention, or with both imprisonment for the same period and fine of the same amount, or with both detention and fine of the same amount.

Whoever acts as a medium or agent for the sale of the lottery tickets specified in the preceding paragraph, shall be punished with imprisonment for a period of not more than six months, or with detention, or with fine of not more than one thousand yuan, or with both imprisonment for the same period and fine of the same amount, or with both detention and fine of the same amount.

CHAPTER XXII.

HOMICIDE.

Article 280. Whoever causes the death of another, shall be punished with death, or with imprisonment for life, or with imprisonment for a period of not less than ten years.

An attempt to commit an offence under this Article shall be punishable.

Article 281. Whoever causes the death of any of his lineal ascendants, shall be punished with death.

Whoever causes the death of any of his collateral ascendants, shall be punished with death, or with imprisonment for life.

An attempt to commit an offence under this Article shall be punishable.

Whoever makes any preparation to commit an offence under this Article shall be punished with imprisonment for a period of not more than three years.

Article 282. Whoever causes the death of another in any of the following circumstances:—

1. With premeditation;
2. By dismembering or disemboweling, or by any other act of cruelty;
3. For the purpose of facilitating the commission of another offence;
4. For the purpose of escaping punishment for another offence, or of securing the benefit obtained through the commission of another offence;

shall be punished with death, or with imprisonment for life.

An attempt to commit an offence under this Article shall be punishable.

Article 283. Whoever causes the death of another from justifiable provocation at the time of the commission of the offence, shall be punished with imprisonment for a period of not less than one year nor more than seven years.

An attempt to commit an offence under this Article shall be punishable.

Article 284. A mother who causes the death of her illegitimate child at the time of or shortly after its birth, shall be punished with imprisonment for a period of not less than six months nor more than five years.

An attempt to commit an offence under this Article shall be punishable.

Article 285. Whoever instigates or assists another to commit suicide or causes the death of another at his request or with his consent, shall be punished with imprisonment for a period of not less than one year nor more than seven years.

An attempt to commit an offence under this Article shall be punishable.

If two or more persons in furtherance of an agreement to die together commit the offence specified in this Article, the punishment may be remitted.

Article 286. Whoever by negligence causes the death of another, shall be punished with imprisonment for a period of not more than two years, or with detention, or with fine of not more than three thousand yuan.

Whoever in the performance of his occupation commits the offence specified in the preceding paragraph by neglecting the degree of care required by his occupation, shall be punished with imprisonment for a period of not more than three years, or with detention, or with fine of not more than three thousand yuan.

Article 287. Deprivation of civic rights may be inflicted for offences under this Chapter.

CHAPTER XXIII.

OFFENCE OF CAUSING BODILY HARM.

Article 288. Whoever without intent to cause death injures the body or health of another, is said to commit the offence of causing bodily harm, and shall be punished with imprisonment for a period of not more than five years, or with detention, or with fine of not more than one thousand yuan.

Whoever does an act of violence against any of his ascendants without causing bodily harm, shall be punished with imprisonment for a period of not more than one year.

Article 289. Whoever commits the offence of causing bodily harm in a manner or by means likely to cause death or grievous bodily harm, shall be punished with imprisonment for a period of not less than six months nor more than five years.

An attempt to commit an offence under this Article shall be punishable.

Article 290. If the commission of the offence of causing bodily harm results in grievous bodily harm, the offender shall be punished with imprisonment for a period of not less than three years nor more than ten years.

Whoever intentionally causes grievous bodily harm, shall be punished with imprisonment for a period of not less than five years nor more than twelve years.

Article 291. If the commission of the offence of causing bodily harm results in death, the offender shall be punished with imprisonment for a period of not less than seven years.

Article 292. Whoever commits against any of his lineal ascendants any of the offences specified in paragraph 1 of Article 288, and in Articles 289 and 290, shall be liable to the punishment prescribed for the offence increased by one-half; whoever commits against any of his lineal ascendants the offence specified in Article 291, shall be punished with death, or with imprisonment for life, or with imprisonment for a period of not less than ten years.

Whoever commits against any of his collateral ascendants any of the offences specified in paragraph 1 of Article 288, and in Articles 289 to 291, shall be liable to the punishment prescribed for the offence increased by one-third.

Article 293. Whoever instigates or assists another to inflict a self-injury which causes bodily harm resulting in death to such other person or whoever at the request or with the consent of another causes bodily harm resulting in death to such other person, shall be punished with imprisonment for a period of not less than one year nor more than seven years; whoever instigates or assists another to inflict a self-injury which causes bodily harm resulting in grievous bodily harm to such other person or whoever at the request or with the consent of another causes bodily harm resulting in grievous bodily harm to such other person, shall be punished with imprisonment for a period of not more than five years.

Article 294. Where death or grievous bodily harm is caused in an affray in which three or more persons take part, every person taking part in such affray and not acting in necessary self-defence, shall be punished with imprisonment for a period of not more than three years; persons who have caused bodily harm shall

be punished in accordance with the provisions relating to the offence of causing bodily harm.

Article 295. Whoever by negligence causes bodily harm to another, shall be punished with imprisonment for a period of not more than six months, or with detention, or with fine of not more than five hundred yuan.

If the commission of the offence, results in grievous bodily harm, the offender shall be punished with imprisonment for a period of not more than one year, or with detention, or with fine of not more than five hundred yuan.

Whoever in the performance of his occupation commits the offence specified in paragraph 1 by neglecting the degree of care required by his occupation, shall be punished with imprisonment for a period of not more than one year, or with detention, or with fine of not more than five hundred yuan; whoever in the performance of his occupation commits the offence specified in paragraph 2 by neglecting the degree of care required by his occupation, shall be punished with imprisonment for a period of not more than two years, or with detention, or with fine of not more than five hundred yuan.

Article 296. Prosecution for any of the offences specified in Articles 288 and 295 may be instituted only on private complaint.

Article 297. Deprivation of civic rights may be inflicted for offences under this Chapter.

CHAPTER XXIV.

ABORTION.

Article 298. A woman who by taking drugs or by any other means causes the abortion of her foetus, shall be punished with imprisonment for a period of not more than one year, or with detention, or with fine of not more than three hundred yuan.

A woman who allows another to cause the abortion of her foetus, shall be liable to the same punishment.

Article 299. Whoever at the request or with the consent of the woman causes the abortion of her foetus, shall be punished with imprisonment for a period of not more than two years.

If the commission of the offence results in death to the woman, the offender shall be punished with imprisonment for a period of not more than five years; if the commission of the offence results in grievous bodily harm to the woman, the offender shall be punished with imprisonment for a period of not more than three years.

Article 300. Whoever for the purpose of gain commits the offence specified in paragraph 1 of the last preceding Article, shall be punished with imprisonment for a period of not less than six months nor more than five years, or with both imprisonment for the same period and fine of not more than five hundred yuan.

If the commission of the offence results in death to the woman, the offender shall be punished with imprisonment for a period of not less than three years nor more than ten years, or with both imprisonment for the same period and fine of not more than five hundred yuan; if the commission of the offence results in grievous bodily harm to the woman, the offender shall be punished with imprisonment for a period of not less than one year nor more than seven years, or with both imprisonment for the same period and fine of not more than five hundred yuan.

Article 301. Whoever without the request or consent of the woman causes the abortion of her foetus, shall be punished with imprisonment for a period of not less than six months nor more than five years.

If the commission of the offence results in death or in grievous bodily harm to the woman, the offender shall be punished in accordance with the provisions relating to the offence of intentionally causing bodily harm resulting in death or in grievous bodily harm.

An attempt to commit an offence under paragraph 1 shall be punishable.

Article 302. Whoever by means of written or spoken words, drawings or pictures, or by any other means publicly advertises any method or any article intended to be used for procuring abortion or offers the services of himself or of another for procuring abortion, shall be punished with imprisonment for a

period of not more than one year, or with detention, or with fine of not more than one thousand yuan, or with both imprisonment for the same period and fine of the same amount, or with both detention and fine of the same amount.

CHAPTER XXV.

ABANDONMENT.

Article 303. Whoever abandons a helpless person, shall be punished with imprisonment for a period of not more than one year, or with detention, or with fine of not more than three hundred yuan.

If the commission of the offence results in death, the offender shall be punished with imprisonment for a period of not more than five years; if the commission of the offence results in grievous bodily harm, the offender shall be punished with imprisonment for a period of not more than three years.

Article 304. Whoever being bound by law or contract to support, maintain, or protect any helpless person abandons such person or fails to give to such person the support, maintenance, or protection necessary for preservation of life, shall be punished with imprisonment for a period of not less than six months nor more than five years.

If the commission of the offence results in death or in grievous bodily harm, the offender shall be punished in accordance with the provisions relating to the offence of intentionally causing bodily harm resulting in death or in grievous bodily harm.

Article 305. Whoever commits against any of his lineal ascendants the offence specified in paragraph 1 of the last preceding Article, shall be liable to the punishment prescribed for the offence increased by one-half.

Whoever commits against any of his collateral ascendants the offence specified in paragraph 1 of the last preceding Article, shall be liable to the punishment prescribed for the offence increased by one-third.

If the commission of the offence results in death or in grievous bodily harm to the ascendant, the offender shall be punished in accordance with the provisions relating to the offence of intentionally causing bodily harm to an ascendant resulting in death or in grievous bodily harm.

Article 306. Deprivation of civic rights may be inflicted for offences under this Chapter.

CHAPTER XXVI.

OFFENCES AGAINST PERSONAL LIBERTY.

Article 307. Whoever brings or keeps another under a state of slavery or under any other similar condition of servitude, shall be punished with imprisonment for a period of not less than one year nor more than seven years.

An attempt to commit an offence under this Article shall be punishable.

Article 308. Whoever with intent that a female person may contract a marriage with himself or with another takes away such female person without her consent, shall be punished with imprisonment for a period of not less than six months nor more than five years.

Whoever with intent that a female person may have carnal knowledge of himself or of another or do an indecent act with himself or with another takes away such female person without her consent, shall be punished with imprisonment for a period of not less than one year nor more than seven years.

Whoever transports beyond the territorial limits of the Republic any female person who has been taken away without her consent, shall be punished with imprisonment for a period of not less than five years nor more than twelve years.

An attempt to commit an offence under this Article shall be punishable.

Article 309. Whoever unlawfully imprisons another or by any other means unlawfully deprives another of liberty of movement, shall be punished with imprisonment for a period of not more than five years, or with detention, or with fine of not more than three hundred yuan.

If the commission of the offence results in death or in grievous bodily harm, the offender shall be punished in accordance with the provisions relating to the offence of intentionally causing bodily harm resulting in death or in grievous bodily harm.

An attempt to commit an offence under paragraph 1 shall be punishable.

Article 310. Whoever commits against any of his lineal ascendants the offence specified in paragraph 1 of the last preceding Article, shall be liable to the punishment prescribed for the offence increased by one-half.

Whoever commits against any of his collateral ascendants the offence specified in paragraph 1 of the last preceding Article, shall be liable to the punishment prescribed for the offence increased by one-third.

If the commission of the offence results in death or in grievous bodily harm to the ascendant, the offender shall be punished in accordance with the provisions relating to the offence of intentionally causing bodily harm to an ascendant resulting in death or in grievous bodily harm.

An attempt to commit any offence under paragraphs 1 and 2 shall be punishable.

Article 311. Whoever by threats or violence causes another to do an act which he is not under obligation to do or prevents another from doing an act which he has the right to do, shall be punished with imprisonment for a period of not more than three years, or with detention, or with fine of not more than three hundred yuan.

An attempt to commit an offence under this Article shall be punishable.

Article 312. Whoever intimidates another by threatening to cause injury to life, body, liberty, reputation, or property, shall be punished with imprisonment for a period of not more than two years, or with detention, or with fine of not more than three hundred yuan.

Article 313. Whoever wrongfully obtains entrance into a dwelling-house or other structure belonging to another or into any of their enclosures or into any vessel belonging to another, shall be punished with imprisonment for a period of not more than one year, or with detention, or with fine of not more than three hundred yuan.

Whoever wrongfully conceals himself in such dwelling-house, structure, enclosure, or vessel, or refuses to leave when requested to do so, shall be liable to the same punishment.

Article 314. Prosecution for any of the offences specified in Articles 308 and 313 may be instituted only on private complaint.

In the case of the offence specified in Article 308, if the injured party marries the offender no private complaint may be made until after a judgment declaring the marriage void or annulling the marriage has become final.

Article 315. Deprivation of civic rights may be inflicted for offences under this Chapter.

CHAPTER XXVII.

OFFENCES AGAINST REPUTATION AND CREDIT.

Article 316. Whoever publicly offers any insult to another, shall be punished with detention, or with fine of not more than three hundred yuan.

Article 317. Whoever makes or circulates any defamatory statement against another with intent that the same may be communicated to three more persons is said to commit an offence against reputation, and shall be punished with imprisonment for a period of not more than six months, or with detention, or with fine of not more than five hundred yuan.

Whoever by circulating written words, drawings or pictures commits the offence specified in the preceding paragraph, shall be punished with imprisonment for a period of not more than one year, or with detention, or with fine of not more than one thousand yuan.

Article 318. A person shall not be punished for an offence against reputation if he proves that the statement is true; Provided that he shall be debarred from proving the truth of any statement concerning the private life of the injured party the publication of which is not of public benefit.

Article 319. Whoever makes a statement in good faith in any of the following circumstances:—

1. By way of self-justification or self-defence, or for the protection of a lawful interest;
2. In a report made by a public officer within his official functions;
3. By way of fair comment on anything subject to public criticism;
4. By way of fair publication of the proceedings of any deliberative assembly, whether national or local, or of any court of justice, or of any public meeting;

shall not be punished for an offence against reputation.

Article 320. Whoever commits an offence against reputation by making or circulating any statement which he knows to be false, shall be liable to the punishment prescribed for the offence increased by one-third.

Article 321. Whoever publicly offers any insult to the memory of a deceased person, shall be punished with detention, or with fine of not more than three hundred yuan.

Whoever commits an offence against reputation in respect of the memory of a deceased person by making or circulating any defamatory statement which he knows to be false, shall be punished with imprisonment for a period of not more than one year, or with detention, or with fine of not more than one thousand yuan.

Article 322. Whoever injures the credit of another by fraudulent means or by circulating rumours, shall be punished with imprisonment for a period of not more than two years, or with detention, or with fine of not more than one thousand yuan, or with both imprisonment for the same period and fine of the same amount, or with both detention and fine of the same amount.

Article 323. Prosecution for any of the offences specified in this Chapter may be instituted only on private complaint.

Article 324. In addition to the infliction of punishment the court may upon application by the complainant order the judgment to be published in whole or in part, at the expense of the convicted person.

CHAPTER XXVIII.

OFFENCES RELATING TO PERSONAL SECRETS.

Article 325. Whoever wrongfully breaks open or conceals any closed letter or document belonging to another, shall be punished with imprisonment for a period of not more than six months, or with detention, or with fine of not more than one hundred yuan.

Article 326. Whoever being an ordained person in any religion, or a medical practitioner, or a pharmacist, or a druggist, or a midwife, or an advocate or counsel, or a notary public, or being an assistant to any such person in his occupation, or having occupied any such position, wrongfully discloses the secrets of another the knowledge or possession of which he obtained by reason of his occupation, shall be punished with imprisonment for a period of not more than one year, or with detention, or with fine of not more than five hundred yuan.

Article 327. Whoever being in the employ of another wrongfully discloses during the term of his employment any commercial or industrial secrets of another the knowledge or possession of which he obtained by reason of his occupation, shall be punished with imprisonment for a period of not more than one year, or with detention, or with fine of not more than one thousand yuan.

Whoever being a public officer or having occupied such position wrongfully discloses the commercial or industrial secrets of another the knowledge or possession of which he obtained by reason of his official functions, shall be liable to the same punishment.

Article 328. Prosecution for any of the offences specified in this Chapter may be instituted only on private complaint.

CHAPTER XXIX.

THEFT.

Article 329. Whoever takes away anything belonging to another in order unlawfully to appropriate the same for himself or for a third party is said to commit theft, and shall be punished with imprisonment for a period of not more than five years, or with detention, or with fine of not more than five hundred yuan.

An attempt to commit an offence under this Article shall be punishable.

Article 330. Whenever theft is committed in any of the following circumstances:—

1. During the night-time by breaking into or concealing himself in a dwelling-place or in any structure which is used as a dwelling-place, with intent to commit theft therein;
2. By breaking through, scaling or climbing over any wall, door, or window;
3. By carrying arms;
4. By a gang of three or more persons;
5. During a time of flood, fire, or other calamity;
6. By a person who makes theft a profession;

the offender shall be punished with imprisonment for a period of not less than one year nor more than seven years.

An attempt to commit an offence under this Article shall be punishable.

Article 331. Anything belonging to one's self which is under attachment or which is under pledge shall be deemed to be a thing belonging to another within the meaning of this Chapter.

Article 332. Things the possession of which is forbidden shall be deemed to be things capable of ownership within the meaning of this Chapter.

Electricity shall be deemed to be a thing within the meaning of this Chapter.

Article 333. If any of the offences specified in this Chapter is committed against a lineal ascendant, a husband or a wife, or any other relative of the same household, the punishment shall be remitted.

If any of the offences specified in this Chapter is committed against any relative not specified in the preceding paragraph, prosecution may be instituted only on private complaint.

Article 334. Deprivation of civic rights may be inflicted for offences under this Chapter.

CHAPTER XXX.

SNATCHING, ROBBERY AND PIRACY.

Article 335. Whoever snatches anything belonging to another in order unlawfully to appropriate the same for himself or for a third party, shall be punished with imprisonment for a period of not less than six months nor more than five years.

If the commission of the offence results in death or in grievous bodily harm, the offender shall be punished in accordance with the provisions relating to the offence of intentionally causing bodily harm resulting in death or in grievous bodily harm.

An attempt to commit an offence under paragraph 1 shall be punishable.

Article 336. Whoever in any of the circumstances specified in Article 330 commits the offence specified in paragraph 1 of the last preceding Article, shall be punished with imprisonment for a period of not less than three years nor more than ten years.

An attempt to commit an offence under this Article shall be punishable.

Article 337. Whoever after having committed the offence specified in paragraph 1 of Article 335 commits the offence of intentional homicide, shall be punished with death.

Article 338. Whoever by threats or violence, by administering drugs, by inducing hypnosis, or by any other means rendering resistance impossible, takes away anything belonging to another or causes another to deliver anything in order unlawfully to appropriate the same for himself or for a third party is said to

commit robbery, and shall be punished with imprisonment for a period of not less than three years nor more than ten years.

Whoever by any of the means specified in the preceding paragraph obtains undue pecuniary advantages or causes a third party to obtain such advantages, shall be liable to the same punishment.

If the commission of robbery results in death, the offender shall be punished with death, or with imprisonment for life; if the commission of robbery results in grievous bodily harm, the offender shall be punished with imprisonment for life.

An attempt to commit any offence under paragraphs 1 and 2 shall be punishable.

Article 339. Whoever after having committed the offence of theft or of snatching then and there employs threats or commits violence in order to secure the thing obtained through the commission of the offence, or in order to escape arrest or to destroy evidence of the offence, shall be deemed to have committed robbery.

Article 340. Whoever commits robbery in any of the circumstances specified in Article 330, shall be punished with imprisonment for a period of not less than five years nor more than twelve years.

An attempt to commit an offence under this Article shall be punishable.

Article 341. Whoever after having committed robbery—

1. commits the offence of setting fire; or
2. commits the offence of rape;

shall be punished with death, or with imprisonment for life.

Article 342. Whoever after having committed robbery commits the offence of intentional homicide, shall be punished with death.

Article 343. Whoever navigates a vessel not being commissioned by a belligerent State or not being part of the naval forces of any State in order to employ threats or commit violence against any other vessel or against any person or thing on board such other vessel is said to commit piracy, and shall be punished with imprisonment for life, or with imprisonment for a period of not less than seven years.

If the commission of the offence results in death, the offender shall be punished with death; if the commission of the offence results in grievous bodily harm, the offender shall be punished with death, or with imprisonment for life.

Article 344. Whoever after having committed piracy—

1. commits the offence of setting fire; or
2. commits the offence of rape; or
3. commits the offence of intentional homicide;

shall be punished with death.

Article 345. The provisions of Articles 331 and 332 shall apply *mutatis mutandis* to offences under this Chapter.

Article 346. Deprivation of civic rights may be inflicted for offences under this Chapter.

CHAPTER XXXI.

MISAPPROPRIATION.

Article 347. Whoever having custody of anything belonging to another unlawfully appropriates the same for himself or for a third party, shall be punished with imprisonment for a period of not more than five years, or with detention, or with fine of not more than one thousand yuan, or with both imprisonment for the same period and fine of the same amount, or with both detention and fine of the same amount.

An attempt to commit an offence under this Article shall be punishable.

Article 348. Whoever in respect of anything of which he has custody by reason of his official functions or of his occupation commits the offence specified in paragraph 1 of the last preceding Article, shall be punished with imprisonment for a period of not less than six months nor more than five years, or

with both imprisonment for the same period and fine of not more than three thousand yuan.

An attempt to commit an offence under this Article shall be punishable.

Article 349. Whoever unlawfully appropriates for himself or for a third party any lost article, any wreck, or any other thing out of the control of its owner, shall be punished with imprisonment for a period of not more than six months, or with detention, or with fine of not more than one thousand yuan.

Article 350. Anything belonging to one's self which is under attachment and the custody of which is retained by one's self, shall be deemed to be a thing belonging to another within the meaning of this Chapter.

Article 351. The provisions of Article 332 shall apply *mutatis mutandis* to offences under this Chapter.

Article 352. If any of the offences specified in this Chapter is committed against a lineal ascendant, a husband or a wife, or any other relative of the same household, the punishment shall be remitted.

If any of the offences specified in this Chapter is committed against any relative not specified in the preceding paragraph, prosecution may be instituted only on private complaint.

Article 353. Deprivation of civic rights may be inflicted for offences under this Chapter.

CHAPTER XXXII.

FRAUD AND BREACH OF CONFIDENCE.

Article 354. Whoever by fraudulent means causes another to deliver anything belonging to such other person or belonging to a third party in order unlawfully to appropriate the same for himself or for another third party, shall be punished with imprisonment for a period of not more than five years, or with detention, or with fine of not more than one thousand yuan, or with both imprisonment for the same period and fine of the same amount, or with both detention and fine of the same amount.

Whoever by any of the means specified in the preceding paragraph obtains undue pecuniary advantages or causes a third party to obtain such advantages, shall be liable to the same punishment.

An attempt to commit an offence under this Article shall be punishable.

Article 355. Whoever makes it a profession to commit the offence specified in the last preceding Article, shall be punished with imprisonment for a period of not less than one year nor more than seven years, or with both imprisonment for the same period and fine of not more than five thousand yuan.

An attempt to commit an offence under this Article shall be punishable.

Article 356. Whoever taking advantage of the inexperience of another who has not completed the sixteenth year of his age or taking advantage of the feeble-mindedness of another causes such other person to deliver anything belonging to such other person or belonging to a third party in order unlawfully to appropriate the same for himself or for another third party, shall be punished with imprisonment for a period of not more than five years, or with detention, or with fine of not more than one thousand yuan, or with both imprisonment for the same period and fine of the same amount, or with both detention and fine of the same amount.

Whoever by any of the means specified in the preceding paragraph obtains undue pecuniary advantages causes a third party to obtain such advantages, shall be liable to the same punishment.

An attempt to commit an offence under this Article shall be punishable.

Article 357. Whoever being entrusted with the management of the affairs of another acts contrary to his duties thereby causing pecuniary loss to such other person with intent to obtain undue pecuniary advantages for himself or with intent to cause a third party to obtain such pecuniary advantages or with intent

unlawfully to cause pecuniary loss to such other person, shall be punished with imprisonment for a period of not more than five years, or with detention, or with fine of not more than one thousand yuan, or with both imprisonment for the same period and fine of the same amount, or with both detention and fine of the same amount.

An attempt to commit an offence under this Article shall be punishable.

Article 358. The provisions of Articles 331 and 332 shall apply *mutatis mutandis* to offences under this Chapter.

Article 359. If any of the offences specified in this Chapter is committed against a lineal ascendant, a husband or a wife, or any other relative of the same household, the punishment shall be remitted.

If any of the offences specified in this Chapter is committed against any relative not specified in the preceding paragraph, prosecution may be instituted only on private complaint.

Article 360. Deprivation of civic rights may be inflicted for offences under this Chapter.

CHAPTER XXVIII.

EXTORTION.

Article 361. Whoever by intimidating another causes such other person to deliver anything belonging to such other person or belonging to a third party in order unlawfully to appropriate the same for himself or for another third party, shall be punished with imprisonment for a period of not more than five years, or with detention, or with fine of not more than one thousand yuan, or with both imprisonment for the same period and fine of the same amount, or with both detention and fine of the same amount.

Whoever by any of the means specified in the preceding paragraph obtains undue pecuniary advantages or causes a third party to obtain such advantages, shall be liable to the same punishment.

An attempt to commit an offence under this Article shall be punishable.

Article 362. Whoever holds another for ransom, shall be punished with imprisonment for life, or with imprisonment for a period of not less than seven years.

If the commission of the offence results in death, the offender shall be punished with death, or with imprisonment for life; if the commission of the offence results in grievous bodily harm, the offender shall be punished with imprisonment for life.

An attempt to commit an offence under paragraph 1 shall be punishable.

Article 363. Whoever after having committed the offence specified in paragraph 1 of the last preceding Article commits the offence of intentional homicide against the injured party, shall be punished with death.

Whoever after having committed the offence specified in paragraph 1 of the last preceding Article commits rape against the injured party, shall be punished with death, or with imprisonment for life.

Article 364. The provisions of Articles 331 and 332 shall apply *mutatis mutandis* to offences under this Chapter.

Article 365. Deprivation of civic rights may be inflicted for offences under this Chapter.

CHAPTER XXXIV.

RECEIVING PROPERTY OBTAINED THROUGH

THE COMMISSION OF AN OFFENCE.

Article 366. Whoever receives anything obtained through the commission of an offence, shall be punished with imprisonment for a period of not more than three years, or with detention, or with fine of not more than five hundred yuan.

Whoever transports, accepts in deposit, or purchases any-

thing obtained through the commission of an offence or acts as a medium or agent for the sale of such thing, shall be punished with imprisonment for a period of not more than five years, or with detention, or with fine of not more than one thousand yuan, or with both imprisonment for the same period and fine of the same amount, or with both detention and fine of the same amount.

Anything acquired in lieu of the thing obtained through the commission of an offence shall be deemed to be a thing obtained through the commission of an offence.

Article 367. Whoever makes it a profession to commit the offence specified in the last preceding Article, shall be punished with imprisonment for a period of not less than six months nor more than five years, or with both imprisonment for the same period and fine of not more than three thousand yuan.

Article 368. If any of the offences specified in this Chapter is committed against a lineal ascendant, a husband or a wife, or any other relative of the same household, the punishment shall be remitted.

Article 369. Deprivation of civic rights may be inflicted for offences under this Chapter.

CHAPTER XXXV.

MISCHIEF.

Article 370. Whoever in a manner likely to cause injury to the public or to any other person abandons, damages, renders useless, or destroys any document belonging to another, shall be punished with imprisonment for a period of not more than three years, or with detention, or with fine of not more than five hundred yuan.

Article 371. Whoever damages, renders useless, or destroys any structure, mine, or vessel belonging to another, shall be punished with imprisonment for a period of not less than six months nor more than five years.

If the commission of the offence results in death or in grievous bodily harm, the offender shall be punished in accordance with the provisions relating to the offence of intentionally causing bodily harm resulting in death or in grievous bodily harm.

An attempt to commit an offence under paragraph 1 shall be punishable.

Article 372. Whoever in a manner likely to cause injury to the public or to any other person damages, renders useless, or destroys anything belonging to another which is not specified in the two last preceding Articles, shall be punished with imprisonment for a period of not more than one year, or with detention, or with fine of not more than five hundred yuan.

Article 373. Whoever with intent to cause pecuniary loss to another fraudulently causes such other person or a third party to dispose of property in a manner causing pecuniary loss to such other person, shall be punished with imprisonment for a period of not more than three years, or with detention, or with fine of not more than five hundred yuan.

Article 374. A debtor who with intent to impair the rights of his creditors conceals, disposes of, damages, or destroys his own property at a time when compulsory execution is about to take place, shall be punished with imprisonment for a period of not more than three years, or with detention, or with fine of not more than five hundred yuan.

Whoever does any of the acts specified in the preceding paragraph with intent to benefit the debtor, shall be liable to the same punishment.

Article 375. Anything belonging to one's self which is under attachment or which is under pledge or which is under lease, shall be deemed to be a thing belonging to another within the meaning of this Chapter.

Article 376. The provisions of Article 332 shall apply *mutatis mutandis* to offences under this Chapter.

Article 377. Prosecution for any of the offences specified in Article 370, and in Articles 372 to 374 may be instituted only on private complaint.

ENGINEERING, FINANCIAL, AND INDUSTRIAL NEWS

RAILWAYS

Board of Trade's Forecast.—According to a telegram from London, the Board of Trade Journal says that from the investor's viewpoint the prospects of railway development in China are promising and that even proposals which themselves are not attractive may be in a much stronger position when they form part of a comprehensive railway system. The Journal adds that it may be expected that 50,000, or even 100,000 miles of railway will be built in China during the next quarter of a century, linking up all the principal ports.

Government Railways Construction Plans.—The Japanese Government Railways propose to complete eight new sections, 129.9 miles in length, this fiscal year. This will bring the mileage of the state lines to 6,169 miles. In addition there are 127 private lines, including 126 light railways and one standard gauge steam railway. The Government Railways have granted a permit to the Katagami Light Railway Company for the construction of a steam light railway, 11.72 miles in length, in Okayama prefecture.

Shanghai Tramways.—Figures for August were as follows:—

	August, 1919.
Gross receipts	\$185,598.05
Loss by currency depreciation...	47,166.68
Effective receipts	\$138,431.37
	August, 1918.
Gross receipts	\$143,968.56
Loss by currency depreciation...	33,487.85
Effective receipts	\$110,480.71
	Eight months ended August, 31, 1919.
Gross receipts	\$1,327,054.46
Loss by currency depreciation ...	328,296.78
Effective receipts	\$998,757.68
	Eight months ended August 31, 1918.
Gross receipts	\$1,101,441.51
Loss by currency depreciation ...	246,664.98
Effective	\$854,776.63

The figures for August are the record, no less than 8,502,942 passengers having been carried. The traffic now carried on the 17½ miles of route is the heaviest known on any tramway system. Recent weekly figures have been as follows:—

Week Ending	Gross Receipts	Loss by Currency Depreciation	Effective Receipts
September 3 ...	\$42,636.81	\$10,841.99	\$31,794.82
September 10 ...	44,485.61	11,378.03	33,107.58
September 17 ...	43,666.28	11,081.07	32,585.21
September 25 ...	43,638.67	11,061.86	32,576.81

Canton Tramway.—A Chinese paper reports that the Kwangtung Tramway Company, the syndicate which has the concession for the construction of tramways in Canton, has already paid \$200,000 of the \$1,000,000 bonus which it has agreed to pay to the municipality. As soon as the municipality has prepared the new roads, made available by the destruction of the city walls and by other means, the laying of rails will begin.

Railless Freight Service for Shanghai.—The Shanghai Tramways plan the inauguration of railless electric car service to link up the important industrial localities and freight collecting and distributing centres in Shanghai. The establishment of a freight service by railless cars equipped to run either by power from overhead trolley wires or batteries will be the first step taken to eliminate the wheelbarrow and coolie-hauled cart from the streets of Shanghai. It is understood that the complete program for the inauguration covers a period of three years, which will see steel bridges built over Soochow Creek at several points. The railless cars would take their power from the overhead lines of the tramways, but use batteries for running up streets not equipped with trams and up to godown doors, etc.

Electric Line for Kwangtung Province.—It is reported that a company will soon construct an electric car line between Dairen and Port Arthur. The capital of the proposed company will be two million yen. The line is to be 25 miles in length—much shorter than the present railway line. The proposed fare is 75 sen per trip.

SHIPPING

New Company in Chungking Trade.—The Szechuan Steamship Company has put its first steamer into the Chungking trade, under the British flag. The Chungking-Hankow trade is booming. One company charges Tls. 35 per ton for freight and \$160 for passage west, or half that amount for eastbound passage; for, of course, the trip through the rapids is made in less time on the eastbound voyage.

Fast Ships for Nagasaki-Shanghai Run.—The Nippon Yusen Kaisha is making arrangements to operate two new passenger ships between Nagasaki and Shanghai. They will cover the distance in 26 hours, or ten hours less than the time now taken.

Japan's Merchant Fleet.—According to returns published by the Shipping Control Bureau of the Department of Communications, the total number of Japanese ships of over 1,000 tons each on official record at the end of June, 1919, was 734, aggregating 2,263,225 tons.

Higher Pacific Fares.—The Pacific Mail, the Canadian Pacific, and the Toyo Kisen Kaisha have raised their passenger fares to G.\$312.50 from Hongkong, G.\$288 from Shanghai, and G.\$250 from Yokohama, to their respective ports of call in North America. The rates on intermediate steamers are now G.\$244, G.\$224, and G.\$187, respectively. The first-class fare from Hongkong was formerly G.\$250.

Increased Freight Rates.—The unsubsidized steamers of the N. Y. K., O. S. K. and T. K. K. have raised their rates from Japan to North America to \$14-\$15 per ton, gold. A further increase is expected.

New Ship for China Merchants.—The *Kwang-kieng*, a vessel of 12 knots speed and a registered tonnage capacity of 2,549, has been completed at Tientsin for the China Merchants Steam Navigation Co. She is to take the place of the *Kiang-kwan*, which was sunk following the collision with the Chinese gunboat *Chutsai*.

Pacific Mail Enlarges Fleet.—As a result of a recent purchase of four 9,000-ton freighters to ply between San Francisco and Baltimore, via Panama and Central American ports, beginning in December the Pacific Mail Steamship Company will accept cargo at Shanghai destined for all ports of call of the new ships, with transshipment at San Francisco.

New Ship for Upper Yangtze.—The *Hungkiang*, which was built at the Nicholas Tsu yards for the Yangtze rapids trade, underwent her speed trials recently and attained 13.9 knots. The vessel, which is owned by the Szechuen Navigation Company, recently departed from Shanghai to be placed on the run between Ichang and Chungking.

Japanese Ship Calls at Hamburg.—The *s.s. Taiyo Maru*, owned by the Goko Shokai, under charter to the Kuhara Shipping Department, put in Hamburg from Batavia in August with 4,000 tons of copra. She is the first Japanese boat visiting a German port after the war.

The Admiral Line Fleet.—The fleet of the Admiral Line, the American shipping line which recently opened offices in the Far East, consists of 104 vessels. The U. S. Shipping Board has recently transferred to the Admiral Line the vessels flying the Barber Line flag, for which Messrs. Dodwell & Co. were the local agents.

Pacific Rate Increase.—Pacific freight rates by conference lines were raised on October 1 from G.\$15 to G.\$17.50 per ton between Shanghai and the West Coast of America. The rate will also apply to freight carried on U. S. Shipping Board steamers. Tea will be carried at G.\$15, the present rate.

S.S. "Nile" Back on Pacific.—The China Mail S. S. Co. have put the *Nile*, the third vessel of the fleet, on the run between San Francisco and Hongkong via Japan ports. With the *Nile* definitely added to the line, the China Mail will have a fleet of three passenger liners, thus maintaining a regular monthly service. The other vessels of the fleet are the *Nanking* and the *China*.

O.S.K. Vessels to Call at Celebes.—The Osaka Shosen Kaisha has decided to have its vessels on the Australian run call at Minado, Celebes, on the outward voyage from Japan only. The freight rate on general cargo from Japan to Celebes is Yen 25. The object of the new arrangement is, of course, to facilitate Japanese exports.

T.K.K. May Reduce Dividend.—The Toyo Kisen Kaisha will probably reduce its rate of dividend for the first six months of this year to 20 per cent., instead of the 30 per cent. paid on the preceding term. The explanation is given that profits this year have been not so great as those of last year, due to the depression of the shipping business which existed in the Spring.

SHIPBUILDING

Shanghai Dock Co.'s Launchings.—Since January 1, 1919, the Shanghai Dock & Engineering Co. have launched five vessels with a total deadweight tonnage of 17,580. Vessels under construction total seven of 18,050 deadweight tons.

O.S.K. Building Freighters.—The Osaka Shosen Kaisha has decided to build five new boats of 3,500 tons for cargo and passengers, to run between Dairen, North China, etc.

T.K.K. to add Cargo Boats to Fleet.—The Toyo Kisen Kaisha will add three 8,500-ton freighters to their fleet next April. The same company has placed orders with Japanese yards for the construction of three more cargo boats of 11,000 tons each.

Japanese Launchings in August.—Merchantmen of over 1,000 tons gross launched during August in Japan numbered seven, aggregating 23,060 tons gross. The launchings in the month show a decrease of 12 below the number launched in August, 1918. Vessels built in Japan from January to August number 87, totalling 267,821 tons; a decrease of 40 in number when compared with launchings for the corresponding period of last year, but an increase of 35,738 tons notwithstanding.

PORTS, HARBORS, ETC.

Dairen Port Improvements.—It is reported that the South Manchuria Railway Company will improve wharf facilities at Dairen, work to be extended over a period of ten years. The new plan is to extend the length of the quay line from 9,754 to 18,760 feet, to be capable of berthing fifteen million tons of ships and handling twelve million tons of cargo a year. With the improvement of the harbor, large steamers will be berthed alongside the pier.

INDUSTRY

Cement Plant for Manchuria.—The use of cement in Manchuria has made it profitable to erect a cement factory. A scheme among capitalists at Dairen involves the flotation of a company with a capital of three million yen to erect a new cement factory at Kakakashi.

Spinning Mill Expansion.—Japanese capitalists are floating spinning mill companies at a great rate, in spite of the possible adoption of the 8-hour day at the forthcoming International Labor Conference and signs of a possible shortening of hours already apparent in their country. Many flotations of spinning ventures, both in Japan and in Shantung province, have been announced. A mill of 20,000 spindles and a capital of two million yen has been proposed for Okazaki, Mikawa province.

Shanghai Waterworks Adds to Plant.—The new pumping plant for the Shanghai Waterworks has been completed and is now in operation. The engine is a Crawleys cross-compound of 250 h.p. with seven million gallons capacity, and the pump is a Worthington, from the Newark-on-Trent plant. Work was started on the plant last June and ended in August.

Canton Electric Service.—The electric light plant at Canton is shortly to be improved by the installation of a large quantity of machinery and electrical supplies, which have just arrived.

Steam Laundry to Open in January.—The Shanghai Laundry Company has announced that machinery for its plant is to be shipped from the United States this month and the next, and its building will be completed in January. It will be the first power laundry in Shanghai.

Native Biscuit Factory for Shanghai.—M. Y. San & Co., successful Chinese manufacturers of biscuits and sweets with headquarters in Hongkong and agencies in all the large cities of South China, the Philippines and Straits Settlements, will shortly begin construction of a huge factory in Shanghai. Offices and shops are now being opened at 37 Nanking Road.

New Meat Packing Plant.—The China Mongolia Export Co., which is erecting a new meat packing establishment in Tientsin, hopes to be ready for operation within two months. One of the firm's steamers, the s.s. *Hanamet*, is at present undergoing repairs at Shanghai.

Hemp Manufacture.—Japanese hemp braid factories number 427, which are equipped with 39,239 machines, 21,473 of which are idle because of labor difficulties and other reasons. The monthly production is now put at 1,529,940 rolls, nearly all of which is exported.

Spinning Mill for Matsusaka.—The Matsusaka Spinning Mill has been floated, with a capital of two million yen, and will construct a spinning mill with 15,000 spindles at Matsusaka.

Nippon Steel Works.—The Nippon Steel Works at Muroran has declared a dividend of 15 per cent. per annum for the past six months.

Spinning Company Enlarges Capital.—The Kyodo Cotton Yarn Company, Fukunochi, Toyama, has decided to increase its capital from Yen 750,000 to Yen 2,000,000. The company hopes to start spinning towards the end of this year.

New Cotton Mill at Nagoya.—The Chuka Cotton Spinning Co., with a capital of five million yen, proposes to establish a mill at Nagoya.

Electric Power in Japan.—The Department of Communications granted 185 applications to use water power during the first six months of the year, the electricity to be thus generated amounting to 283,471 horse-power. During the same period 25 new electric concerns, with a capital of nearly four million yen, began operations with a production of 1,123 kilowatts. At the end of June the electric output of all companies stood at 463,437 kilowatts hydraulic and 162,364 kilowatts steam. Power plants under construction at that time would increase these figures by 430,895 kilowatts hydraulic and 135,810 kilowatts steam.

Paper Pulp from Sea Plants.—A group of Tokyo business men is promoting a company—the Dai Nippon Kaisei (marine plant) Pulp and Paper Manufacturing Co.—with a capital of Yen 2,000,000 for the purpose of manufacturing pulp for paper making from sea plants.

New Dock for Osaka.—The Nitta Kishen Kaisha is reported to be constructing a dock capable of taking a vessel of 8,000 tons at the mouth of the Kizugawa, Osaka, with the object of establishing a ship repairing works.

Japanese Flour Mill in Manchuria.—It is reported that a Sino-Japanese Company has been formed with a capital of Yen 3,000,000 to establish a flour mill at Kaiyuan, Manchuria.

Industry for Seoul.—A report from Seoul, Korea, says Japanese capitalists are starting an electrochemical industrial company at Seoul with a capital of Yen 5,000,000.

Toshin Electric Co.—The Toshin Electric Company (Japan) has decided to increase its capital from Y.3,390,000 to Y.10,000,000 for the increase of its activity in the future.

Mineral Water Co.—The Teikoku (Japan) Mineral Water Company, which has been run with a capital of Y.600,000 besides a reserve amounting to about Y.300,000, is now reported to have decided, though informally, to increase the capital to Y.1,500,000.

Tadotsu Dockyard.—The Tadotsu Dockyard run by Mr. Yoshisue, of Osaka, at Tadotsu, Shikoku, Japan, as a limited partnership, is now making arrangements for reorganization as a joint-stock company with an increased capital of Y.2,000,000 to cope with the increased work.

Oji Paper Co.—The Oji (Japan) Paper Manufacturing Company is reported to have decided to issue debentures to an amount not exceeding Y.5,000,000 in the near future, consequent upon the need of funds created by the extension of the mills and by the necessity of redeeming its old loans.

Yokohama Fish Oil Co.—The Yokohama Fish Oil Manufacturing Company contemplates an increase of capital with a view to effecting the extension of works and also the improvement of plant besides the establishment of direct export trade to Europe, and the import of raw materials such as copra. The present capital of the company stands at Y.3,800,000, of which Y.1,000,000 is still left unpaid and the company is, therefore, making calls on this balance in October and November. When the capital has been fully paid up, the company will, we understand, increase that capital to Y.7,600,000.

MISCELLANEOUS

Shanghai Municipality to Buy Motor Trucks.—The Shanghai Municipal Council will purchase two trucks and two trailers for the use of the Public Works Department. The engineer of that Department reports that road materials can be transported cheaper by motor trucks than by the present use of wheelbarrows. Motor trucks carry road materials for a cost of 69 tael cents per *fong* per mile, and this will be reduced when the price of gasoline drops. The engineer estimates the cost of wheelbarrow transportation at 88 per cents for the same work, and predicts an increase.

Record Enrollment at American School.—The increased American population is reflected by the enrollment for the current year of the Shanghai American School. Pupils number 140, an increase of between 40 and 50 over previous years.

Chinese Aeroplanes Arriving.—Shipment of aeroplanes for the Chinese Government is under way, and a number of cases have arrived in Shanghai. Means of transportation to Tientsin are now sought. The vessels regularly on the Tientsin run have hatches too small to admit the cases.

Publication on Vegetable Oils.—The Government of Indo-China has published a valuable pamphlet by Charles Crevost, entitled "Oil-bearing Plants of Indo-China," giving details as to prices of seeds and oil and methods of production of oil from cotton, kapok, hemp, sesame, oil palms, castor beans, coconuts, and many other oil-bearing plants. The remarks about extracting oil from the seeds of the rubber tree are of special interest. The information given will apply equally well to many other tropical lands.

Need for Sprinklers in China.—The recent total loss by fire of a fine flour mill in Shanghai calls attention to the necessity for a wider use of automatic and other forms of water sprinklers in Chinese plants. The mill, the No. 2 plant of the Fook Sing Flour Co., was entirely wiped out by flames.

American Population in Manila.—During the past four years the American population of the city of Manila has decreased by 42.79 per cent. The 1914 sanitary census showed an American population of 5,764 while the 1918 figures show only 3,134 American residents in the city. The big decrease in the number of Americans is due in the main to retirement from the insular government service.

Cotton Expert for Nanking University.—Professor J. B. Griffing, head of the Agricultural Department of the Arizona State Normal School, has been engaged as cotton specialist for the Nanking University. He will take up the work in January. Two experts from the U.S. Department of Agriculture are now devoting much of their time in China to examination of the twenty-odd cotton experiment stations started this year in different parts of China under the direction of Professor Reisner, of Nanking, dean of the Department of Agriculture. The experiments are with various strains of American and other foreign seeds as well as with interplanted varieties of Chinese cotton.

China Plans to Buy Submarines.—A native newspaper reports that negotiations are being carried on between an Italian firm and the Ministry of the Navy for the sale of a hundred submarines at a total cost of thirty million francs spread over a period of ten years.

Wages in Japan.—Wages in Japan are going up, according to an investigation made in Tokyo by the Chamber of Commerce. It seems that weavers are now being paid 1-1.50, goldsmiths 1-3.50, tailors 1.70-3.50, carpenters 1.70-1.90, plasterer 1.80-2.30, masons 2.00-2.50, and compositors 0.63-1.64 per day, the figures being in yen. Male servants are earning Y.18 and board and maid servants Y.10 and board per month, according to the same authority.

Price of Tokyo Commodities.—The Bank of Japan's investigations show that of 56 leading commodities 33 rose in price during August, 15 declined and 8 remained stationary, the index number for the month being 332.23. The index number shows an increase of 1.66 per cent. over the preceding month and 23.13 per cent. over August, 1918.

COMMERCE

International G. E. Co.—The International General Electric Company, Inc., have established a direct representative in Shanghai with office at present located at 15 Robison Road, in charge of W. M. States, manager of Shanghai office, representative for the Far East exclusive of Japan, with H. C. Stone, assistant to Manager. The International General Electric Company, Inc., owns and operates the China General Edison Company at the same address, which Company manufactures incandescent lamps for the Far Eastern trade. The products of the International General Electric Company, Inc., are sold in China by Andersen, Meyer & Company, Ltd.

Japanese Trade.—There has been a further increase in Japanese exports and imports, during the period January 1-July 31. Imports were 1,193,000,000 and exports Yen 1,007,000,000, compared with 934 million and 991 million respectively in the corresponding period of 1918.

American Firm Opens Shanghai Branch.—The Henius Company, with headquarters in Portland, Oregon, and branches in many parts of the world, have their representatives in Shanghai for the purpose of opening offices and godowns. The company, which conducts a general importing and exporting business, will represent some 300 American firms in the Orient. Machinery, automobiles, textiles and grain are among the commodities handled.

Shanghai Copyright Case.—Messrs. Dodge & Seymour of Shanghai have succeeded in securing from the Mixed Court an order against certain shopkeepers to hand over to the Court for destruction a quantity of face cream described as a colorable imitation of Pond's vanishing cream. It was stated that the cream had been manufactured by a Japanese firm. On the question of awarding damages, judgment was reserved.

A New Sino-British Company.—A new Sino-British company for manufacturing and trading purposes has been founded under the name of the Sino-British Trade Corporation. The capital is \$5,000,000, a quarter of which is reported to have been paid up. Half of the shares are to be subscribed for by Chinese and half by British. The Chinese Directors are Mr. Liang Shih-yi and Mr. Chien Neng-hsun, while the British are Mr. W. G. Metcalf, of Messrs. Babcock & Wilcox, Ltd., Shanghai, and Major Nathan, of the Kailan Mining Administration, Tientsin. The company will—in addition to doing other things—manufacture steel products in North China. Mr. Metcalf will be the manager of the new enterprise. He is now on his way to London to make final arrangements with the British financiers interested.

MINING

New Colliery Company.—A new coal company has been started in Kiangsi province, called the Kai Yuen Mining Company, with a capital of six million Mexican dollars. The whole concern is local and no outside money has been invested in it. The object is to mine the rich coal fields at Loping and district and export to Hankow. About 20 large coal lighters have been constructed, in which the coal will be conveyed. The new company is well financed, well organized, and well equipped.

Shihpelling Colliery Strikes Coal.—The South Manchuria Mining Company, which has obtained from the South Manchuria Railway Company the concession to mine the Shihpelling colliery, about 7 miles south of Changchun, is reported to have struck the coal bed at a depth of 180 feet and 30 feet further down the miners found two coal beds, one six feet and the other two feet thick.

Seoul Mining Company.—The milling plants on the Suan Concession treated a total of 12,680 tons of ore during August for a gross production of Yen 147,739.12. The August production was retarded from two causes, viz., lack of mill water supply due to drought, and undercurrent of unrest among the mine laborers, which was met with a general increase to all hands. Favorable developments continue in the South Mine at Tulumchung.

New Coal Venture.—Chinese coal merchants have formed a company to be known as the King-sha Coal Mining Co., for the purpose of exploiting mines in the district of Kingtan, Kiangsu Province, according to the native press. Two engineers, one Chinese and one foreigner, have been engaged to superintend operations.

Japanese Coal Output.—Output of coal in Japan for the first six months of this year is put at 13,560,000 tons, from the following fields: Kyushu, 9,350,000; Japan proper, 2,150,000; Hokkaido, 1,850,000 tons; other territories, 700,000.

Iron Exploitation in Manchuria.—Okura & Company, a Japanese firm, is reported to have secured permission for the working of an iron mine in the Tiehling district, Fengtien province, to supply the Imperial iron foundry. It is understood that the iron deposits discovered by Japanese engineers at Kungchangling are quite rich.

Japanese Silver.—A group of Kyoto businessmen are interested in a scheme for exploiting gold and silver mines in Takino-mura, Kinokuni-gun, Hyogo Prefecture, Japan, with a capital of Y.500,000 to start with.

Hunan Lead-Silver Mine.—The Hunan provincial government is operating directly the Shui Kou Shan lead-silver mine, one of the largest in China. The ore is being smelted as it is mined, but the government is short of funds and the lack of capital is a serious handicap. According to the U. S. Trade Commissioner, Mr. J. M. Clements, this is partly due to the fact that, while the silver is shipped away, the 40 per cent. of zinc which the ore contains has been stored since 1915. About 100,000 tons of zinc ore are now on hand, worth about \$2,500,000 gold.

CONSTRUCTION

New Shanghai Fire Station.—Bids have been asked for the construction of a fire station in Yangtszepoo Road, Shanghai. The building is to be fire-resisting throughout, with reinforced concrete floors and roof. The external walls are to be of red brick, the ground floor and the main frontages will be faced with artificial stone, and there will be stone trimmings on the upper floors. The estimate of the cost is put at Tls. 60,000.

Modern Chinese Hotel.—The Hotel Asia, an adjunct of a Chinese retail department store owned by the Sun Company, at Canton, has been opened for business. The hotel has a hundred guest rooms, the best of which are equipped with telephones, circulating water, etc. Both Chinese and foreign guests will be provided for in the new hostelry. It is situated on the West Bund.

The Yokohama Budget.—The city of Yokohama is planning several gigantic projects calling for an outlay of approximately 293 million yen, including government subsidies of Yen 81,850,000. New roads will account for the biggest appropriation of 116 million yen. Harbor works, drainage, tramways, parks, and electric power plants are other important items.

Y.M.C.A. Buildings.—Work has been commenced on the south wing of the Y.M.C.A. building on the corner of Hongkong and Museum Roads, Shanghai. The present structure, which is under way, is an imposing building of five floors; and it will be augmented by the new wing now started, the construction of which was not contemplated until the release of additional funds by the American headquarters a short while ago. It is hoped to have the present building completed by January 1, 1920. A Y.M.C.A. building at Hangchow, Chekiang, which is being erected at a cost of Tls. 60,000, will be ready in November.

FINANCIAL

Shanghai Municipality Opens Bank.—With the object of encouraging monthly saving for periodical investment in Municipal debentures, the Shanghai Municipal Council has inaugurated a Municipal Investment Bank. Deposits in any amount will be received from the first to the fifth of each month, and debentures in the current loan will be issued to depositors on March 5 and September 5. Money will not be subject to withdrawal except in case of death of depositors or refusal of the Council to receive further deposits. The Council points out that the 7 per cent. loan issued at 95 is an excellent investment.

Chartered Bank's Dividend.—The Chartered Bank of India, Australia and China has declared an interim dividend for the past half-year at the rate of 14 per cent. per annum free of income tax.

Gold and Mexican Dollar at Par.—Recent fluctuations in the price of silver have so increased the price of the metal as to bring the silver dollar at par with the gold dollar. At least this is true in Shanghai, where recently a Mexican dollar has been the price offered for a gold dollar. Expressed in terms of taels, the tael is worth G.\$1.36.

Sumitomo Bank's Dividend.—The Sumitomo Bank has declared a dividend of 8 per cent. per annum. The net profits of the bank of the past six months were Yen 3,617,038, of which Yen 975,000 is being paid as dividend.

Another Japanese Bank.—The Mitsubishi Bank, Ltd., has recently been established with a subscribed capital of fifty million yen, of which thirty million yen is to be paid up. The new bank will take over the entire business of the banking department of the Misubishi Goshi Kwaisha.

Bank of Taiwan.—Considering the advantageous position Japan has occupied during the War, it is not surprising to find that the Bank of Taiwan made very substantial progress in the half-year to December 31. Deposits increased 180 million yen to 451 millions, and there was an expansion of 8½ millions in the note circulation. Consequently cash balances have risen 33 millions, and discounts, advances, etc., have increased 130 millions to 530 million yen. Gross profits rose Yen 13,840,000 to Yen 39,576,000, but most of the gain was absorbed in higher working charges. However, it is possible to increase the allocation to reserve from Yen 300,000 to half a million, and after paying the usual dividend of 10 per cent. per annum the amount carried forward is 183,000 higher at Yen 575,000. The subscribed capital has been increased by 10 millions to Yen 30,000,000.

Japanese Banking Capital.—The following is a list of the principal recent increases in the capital of leading Japanese banks, as given by the *Japan Chronicle*:

Mitsui	...	20,000,000	100,000,000
Yokohama Specie	...	48,000,000	100,000,000
Bank of Formosa	...	30,000,000	60,000,000
Mitsubishi	...	1,000,000	50,000,000
First	...	22,700,000	50,000,000
Industrial Bank of Japan	...	30,000,000	50,000,000
Kitahama	...	4,000,000	10,000,000
Eighty-first	...	4,650,000	10,000,000
Tokai	...	3,000,000	10,000,000
Seiryu	...	3,000,000	6,000,000
Twenty-third	...	2,400,000	5,000,000
Dairen	...	1,000,000	5,000,000
Akita	...	1,000,000	5,000,000
Commercial Bank of Formosa (?)	...	2,000,000	5,000,000
Twelfth	...	3,000,000	5,000,000
Chuetsu	...	2,000,000	5,000,000
Thirty-fourth	...	25,000,000	50,000,000
Konoike	...	3,000,000	10,000,000
Naniwa	...	15,000,000	30,000,000

It may be added that although not included in this list, the Sumitomo Bank has an authorised capital of Y.30,000,000, of which Y.22,500,000 is paid up.

New Asia Bank Head.—Mr. W. G. Avery, formerly an executive officer in the foreign department of the Guaranty Trust Company in New York, has arrived in Shanghai to succeed Mr. Ralph Dawson, the present head of the Asia Banking Corporation. Mr. Avery's headquarters will be in Shanghai. Announcement has been made that the corporation has doubled its capital, which now stands at four million gold dollars, with a surplus of a million dollars.

A Chinese Loan to Kueichow.—The Chinese Press states that the Kueichow Provincial Government has contracted a loan of G.\$5,000,000 from the Industrial Company of Overseas Chinese, with interest at six per cent., price 96, redemption in twenty years. The Company gets the option of installing electric light, tramways and waterworks in open ports of that province, with certain navigation rights as well.

Explanation of Shensi Loan.—In reply to a telegram submitted by the Shanghai General Chamber of Commerce, the Ministry of Agriculture and Commerce at Peking has issued the following rescript: "Upon the receipt of a telegram from the said Chamber, stating that the newspapers had reported that Shensi had pledged away the monopoly of its cotton trade for a Japanese loan, etc., a rescript was at once issued informing the Chamber that telegraphic inquiries were being made, and that as soon as a reply had come from Shensi, this Ministry would consider the case again, as on record. Now, the Shensi Provincial Chief has telegraphed, stating that a Japanese loan was obtained some time in 1918 for the purpose of establishing a mint and a cotton mill in Shensi, which is secured, according to the agreement, by the Provincial Loan Bonds and the profit that may be derived from the business of these two establishments in future. He emphatically denies any concession of cotton monopoly to foreigners for a period of 10 years. He points out that a copy of this loan agreement and a sample of the provincial loan bond has been filed at the Ministry of Finance which can be inspected, etc."